

GANGRENE OF THE SCROTUM.

By E. E. KELLY, M.D., San Francisco, Cal.

Read before the California Academy of Medicine.

As a basis for my remarks and conclusions upon this subject, I wish to introduce the following case: On May 23, 1893, I was called to see Chas. Thomas, a bootblack, colored, aged 34 years; married, with a family of healthy-looking children; who gave the following history: Has always enjoyed good health. Has had the ordinary diseases of childhood. Denies all forms of venereal disease, and no evidence of syphilis is to be seen either upon himself or upon his children. A number of years ago he had a swelling and contraction of the left elbow, for which a resection was made. No other evidence of tuberculous disease was discovered, and no history of tuberculosis could be found among his relatives.

The first symptoms of the present trouble were noticed several days previous to my visit, when he observed some swelling of the prepuce, which prevented its retraction. The swelling rapidly extended, soon involving the integument of the entire penis and scrotum. The swelling was accompanied by slight itching and burning, and a dull pain, but not sufficient to cause any great inconvenience. About four days after the beginning of the swelling, the gangrenous process began, involving a small patch upon the inferior surface of the penis. From this point it rapidly spread to the scrotum.

I found my patient in the following condition: He was apparently a well-nourished individual, and yet had an anxious, hippocratic face. His temperature was 103° F.; pulse, 120, small and thready. For 48 hours he had had alternating chills and sweats. The house was permeated with the stench of decaying flesh. Upon examination, the scrotum was found to be a mass of gangrenous tissue. The lower surface of the penis displayed a large patch of denuded surface of irregular shape, extending back to the scrotum, from which the dead skin had fallen off. The urethra was uninvolved, and the patient had had no difficulty in urinating at any time. The scrotal tissue was entirely dead, and had separated from the integument and fascia covering the rami of the pubes and ischii and the perineal tissues behind.

With scissors I removed the sloughing mass without encountering any living tissue whatever. Beneath the mass of dead tissue, the connective tissue and tunica vaginalis covering the testes were black and gangrenous. When the sloughs were removed, as far as separation from the living structures beneath had taken place, the testes were entirely exposed, and also a large part of the spermatic cords dragged down by the weight of the unsupported organs. Some sloughing masses remained undetached; a charcoal dressing was applied, and a supportive treatment inaugurated.

After three or four days the sloughs separated entirely from the testes, leaving the white, fibrous tunica albuginea plainly visible. Not having before seen such extensive death of the tissues of this region, but remembering the rapid reparative processes of nature when a smaller surface was involved, I determined to wait and see what nature would accomplish in this case. The reparative process was most rapid and interesting. Using simply a dusting powder of sub-iodide of bismuth and a covering of iodoform gauze and absorbent cotton, frequently changed, I saw the "*vis medicatrix naturæ*" fashion and build a new covering for the denuded organs which could not be equaled by the most skilful surgical processes.

The testes were supported and held up near the body until a profuse growth of healthy granulation tissue, springing from the edges of the denuded surface, had grown up and around them, fixing them in this position. Remembering the elasticity of the integument of this region, as shown by the great elongation of the scrotum in neglected cases of inguinal hernia, I attempted to assist nature in the work of enclosing the exposed organs by drawing upon the surrounding skin with strips of adhesive plaster, but with indifferent results.

The reparative process was accomplished by the exuberant growth of granulations from around the edges of the denuded surface, drawing the skin along with them as they gradually surrounded the testes, so that a very small surface was left to be covered by cicatricial tissue, as I hope to show you by the patient's present condition.

The integument of the penis reformed rapidly, but shows far more cicatricial tissue than is present on the scrotum. The cicatricial tissue is devoid of pigment, a not unusual result to be seen in scar tissue of the negro race. In seven weeks from my first visit, the repair was complete.

Gangrene of the scrotum is by no means of rare occurrence. The genital region of the body in both the male and female is frequently the seat of such processes. The anatomical character of the penis and scrotum, especially the latter, makes strangulation of its tissues

easily possible. The scrotum consists of simply the skin and the superficial fascia, which is a continuation of the fascia of the perineum, groin and inner sides of the thighs. It is connected by a very loose, areolar tissue to the tissues beneath, and is freely movable over them. In other portions of the body the skin and superficial fascia is intimately connected with the deeper structures, and frequent capillary vessels pass back and forth from skin to fascia. In the scrotum those inosculating capillaries are not found. All the vessels are long and tortuous, and while very numerous, having frequent anastomosing branches with each other, have no connection with the arteries of the deeper structures. Therefore, when the scrotum becomes edematous, the serum pressing upon these vessels is quite likely to occasion strangulation and death of the tissues.

This region, also, in those not scrupulously cleanly in their habits, affords a most favorable field for the lodgment and development of various microbic organisms, ready to invade the tissues when the minutest door for infection opens to them. Infiltration of urine in this region not infrequently occasions extensive destruction of tissues. Erysipelas may be followed by gangrene, and it is quite probable that some so-called cases of idiopathic gangrene may result from this cause. Dr. Allen, of New York, suggests that the streptococcus may in some cases produce simply erysipelas, and in others—where there is lowered vitality, or in tissues with lower resistance, or where for any reason the pathogenic power of the streptococcus is increased—a gangrenous process.

Diabetes seems to lower the vitality of the entire organism, rendering its resistance to diseases much less effective, and gangrene of the scrotum or other parts of the body is not infrequently seen as a result of this disease. Thrombosis and embolism are given as causes of gangrene of the scrotum. But such cases must be of limited extent, since the scrotum receives its blood supply from so many sources, and anastomosis is so free between them that the collateral circulation would be quickly established unless the thrombus or embolus should involve the common iliac artery or the several arteries supplying the scrotum.

The acarus, itch-mite, and the pediculus pubis have each been assigned etiological relationship to gangrene of the scrotum, but I am inclined to think that very few authorities, in these days of bacteriological research, will admit any direct relationship between the parasites and the gangrenous process. However, the presence of these itch-mites may open a highway of infection for specific microbes into the lymphatic channels through the scratching nails of the victims.

The rapid advance in recent years of bacteriology and microscopy threatens to greatly weaken, if not to destroy, one of our time-honored refuges when, from lack of knowledge of an adequate cause, we learnedly call the condition an "idiopathic" one. It seems to me quite probable that what we have been accustomed to style idiopathic gangrene of the scrotum will ultimately prove to be microbic in origin.

Unfortunately, owing to the late stage of the disease in this case when first observed, no bacteriological investigations were made, and therefore no definite conclusions can be arrived at. However, in the absence of any other discoverable pathological factor, I am inclined to believe that microbic infection occurred through some unnoticed lesion at the point where the swelling first began.

In my search for literature on this subject, I have been unable to find any large number of cases, and in most of those reported there have been open lesions in the groin or vicinity, or some constitutional dyscrasia—as diabetes or alcoholism. In conversations with surgeons of this city I have met with equally poor results, and they affirm that such cases as the one detailed in this paper are exceedingly rare. Dr. L. C. Lane says he has seen but one case on this coast, but that he had seen several in Paris.

Dr. Alexander Marcy, of Baltimore, reports a case in a child two weeks old, where sloughing of the scrotum and part of the skin of the penis occurred. As in the case I have reported, the lesion began in edema of the penis and rapidly extended to the scrotum, followed by gangrene of the entire scrotal sac. Rapid and complete recovery occurred. He expressed no opinion as to the etiology of the case.

Dr. Platt, of Baltimore, in the *Medical News*, reported three cases where gangrenous patches appeared on the scrotum after operation for the removal of inguinal glands. In all of these cases the sloughing involved the side of the scrotum corresponding to that from which the glands were removed, and not involving the opposite side. In all of the cases, a bridge of healthy skin separated the sloughing surface from the operated field. Hence he concludes that the gangrene was of neurotic origin, resulting from injury to the trophic nerves through the operation in the groin, since the nervous supply is the same to the lymphatics of the groin and to the scrotum. He arrives at his conclusions by exclusion: excluding septic gravitation, from the fact that the currents in the lymph channels are toward the body; strangulation of the blood supply was excluded, from the numerous arterial branches extending to the scrotum, remote from the field of operation. There was no evidence of erysipelas at the site of operation and the sloughing did not involve any tissues con-

tiguous to it. In support of the theory of neurotic origin, he refers to other reflex phenomena of the skin, as various forms of herpes and in the symmetrical gangrene of Reynaud's disease.

Dr. Abbé, of New York, reports several cases of sloughing of the ischio-rectal fossa, in a paper entitled "An Idiopathic Gangrenous Cellulitis Around the Rectum." He expresses his opinion that the cases were of septic origin.

The most recent case reported is one by Dr. C. W. Allen, before the New York Academy of Medicine, January 9, 1894. The subject, an oyster-man, 34 years old, was admitted to the City Hospital March 15, 1893. In this case there was a suppurating bubo in the groin. The patient was intoxicated when he first noticed the dull pain and swelling of the scrotum. In four days the swelling became gangrenous and left both the testicles exposed. As in my own case, he left the healing process to nature and dismissed the patient entirely cured in six weeks from the time of his admission. He concludes that alcoholic excesses, an indefinite history of violence, and the open wound were probably important etiological factors in his case.

The treatment in these cases should always be a conservative one. The first impulse of the surgeon, upon seeing the testicles entirely denuded, is to remove them, as it seems quite impossible that they can be enclosed with a covering of skin without the presence of so much scar tissue as to make unnatural pressure upon them and to render them useless. But from the history of all these cases in which nature provided for the exposed organs, I conclude that in no case is removal justifiable so long as the testicles are not included in the gangrenous process. It must be remembered that however urgent the need of castration, and however rapid the cure, the patient never forgives the surgeon who unsexes him. Some simple antiseptic dusting powder and a due regard for cleanliness are the only measures needed, unless the granulating tissue becomes unhealthy. If any constitutional dyscrasia be present, such as diabetes, it, of course, should be carefully attended to, and supportive measures used to build up the general health.

In conclusion, let me say that from the clinical side alone it would seem not improbable that the gangrenous process in the scrotum, when not due to constitutional dyscrasia, is infectious in origin, since in all but two of the reported cases I have mentioned, an open channel of infection is recorded, and it is not improbable that in these two some unnoticed door of infection was open to the microscopic germs.

**CATARRHAL PNEUMONIA IN CHILDREN, WITH REFERENCE
TO A SPECIAL METHOD OF TREATMENT.**

By F. B. SUTLIFF, M.D., Sacramento, Cal.

Read before the Sacramento Society for Medical Improvement.

While there are few diseases with which the general practitioner may not come in contact at any time, there are some that he can regard as belonging to the season of the year. The fall and summer months accompanied by fevers and bowel diseases, while winter brings pneumonia and bronchitis in their different forms; and, of late, influenza. Of all the forms of pneumonia with which we have to deal—and all are serious—I think none is calculated to give the practitioner more concern, nor to cause the friends more alarm, than that form so often seen in young children and old people—broncho-pneumonia.

There seems to be some confusion in giving to the condition a name that will suit the symptoms. Gordon Morrill, in Keating's *Cyclopedia of Diseases of Children*, when trying to give a definition, speaks of it as "acute broncho-pneumonia, acute lobular pneumonia, and others which are obsolete." Osler says that much of this confusion has arisen from the description of capillary bronchitis as a separate disease, "whereas it is only a part, though a primary and important one, of broncho-pneumonia."

We all are perfectly familiar with the clinical picture of the disease. We are generally told that the child "has a cold on the chest;" that it has been ill for a day or two, that home remedies have been given without effect, and the mother has become alarmed because of the fever and other symptoms of distress. We find the patient with all the symptoms the mother speaks of, and more. The pulse may be very rapid, the respiration proportionately increased, fever high, and the eyes often having nearly the expression that we see in croup. Upon auscultation, the trouble is often found to have extended over a large area of both lungs, though I have seen cases where only one was affected. Marked dulness is not found upon percussion, at least in the beginning of an attack, though it can often be discovered in spots. Later on it may become general, and this can well be understood when we reflect that the condition may be such as one author, Morrill, describes. He says "in severe cases every component part of the lung may become implicated by the inflammatory process, which assumes in each part the form proper to the tissue affected."

Osler says that "the disease is, as a rule, a secondary affection, often coming on after scarlet fever, whooping cough, or measles, and

less often following smallpox, erysipelas and typhoid fever." I think that the greater number of cases met with in this locality are primary, though it is surely to be dreaded as a complication of the diseases mentioned. Morrill claims that climate is an important factor, and lays a deal of blame to sudden changes. This fact is borne out in our own locality, as it is in the season of wet and changeable weather that we meet with most cases. He says it is during the period of dentition that the disease occurs with the greatest frequency and is attended with the greatest fatality. This he claims is due to the fact that "the bronchial and respiratory epithelium is of greater size during this period; to its irritability, the ease with which it is proliferated and shed, and the fact that inflammation in children is apt to be of the embryonal type. As the lung develops, the disease is less frequent and fatal." This is proven by records of autopsies, and he gives tables to support his position.

He further states that no germ peculiar to the disease has so far been discovered, and that the history of the disease, as to lack of contagion, is such as to lead to the belief that there is none. No one has observed a house to house contamination, as is often seen in croupous pneumonia. He thinks the inflammation due to numerous causes, and that it is transmitted to the bronchial mucous membrane. Northrup says that children who are confined to bed for a long time are very prone to contract the disease in a low, insidious form. Hypostatic congestion of the lungs and the collection of bacteria in the mouth favor it. I think that we can all agree with him when he says that it is often the scrofulous child, one that is poorly nourished, and whose surroundings are not of the best, that contracts the disease, though this is by no means always the case. I have seen it in the best as well as in the poorest homes, but not so often.

Nathan S. Davis says the disease may arise from all the causes that are capable of exciting inflammation in the lungs and medium-sized tubes. That the temperature seldom rises beyond 103° F., unless the disease is complicated with lobular pneumonia; that the urine, as in other forms of pneumonia, is deficient in chlorine salts. The late S. O. Vanderpool, of New York, was in the habit, years ago, of teaching that frequent examinations of the urine should be made during an attack of pneumonia, as by a return of the chlorides the practitioner might be assured of a prompt change in the disease for the better, and so, often declare it before it could be seen by others. Davis says, further, that if the disease continues beyond the third or fourth week it is prone to become chronic, to continue indefinitely, and that a prolonged attack seems to cause a susceptibility to the disease which recurs again and again.

Pepper says, after stating the causes already given: "Finally, there are many persons who possess a catarrhal diathesis; that is, in whom the epithelial layers are especially vulnerable, and when attacked are especially prone to take on cellular proliferation of a deep-seated and obstinate character." All authors mention the fact that the disease may result in pulmonary phthisis. Pepper describes a very interesting case in a young man, 23 years of age, whose attack was followed by gangrene of the lungs, and as a result there were frequent attacks of hemoptysis. He was in bed four weeks.

We have all seen how severely the nervous system may suffer from the effects of the disease, convulsions in children and delirium in young people being by no means uncommon. All writers admit the gravity of the disease, and no practitioner can fail to appreciate the danger it brings, especially to the very young, the feeble and the aged. In view of this fact its treatment becomes of very great importance.

Osler recommends a purge of castor oil or calomel, a jacket of cotton wool, opium for pain and restlessness, good food, brandy; if the pulse should show signs of failing, stimulating expectorants, such as ammonia, squill and senega. For children he prefers the aromatic spirits of ammonia to the carbonate. He says if the tubes fill too much with mucus, emetics should be given, either the wine of ipecacuanha or, if necessary, tartar emetic. In threatened collapse he recommends strychnin, electricity, the hot and cold douche, and inhalations of oxygen.

Pepper says that there is a deal of good in all this, but argues that the greatest attention should be given to the digestive functions. That not only the diet but the whole plan of medication should be laid out with the view of not disturbing that powerful ally, the stomach. He claims that there is, as shown by the tongue, a catarrhal condition, not only of the bronchi, but of the whole gastro-intestinal tract. He therefore restricts the diet in the early stage, and gives, if called for, quinine by enema, so as not to disturb the stomach. He speaks of the good effect where opium cannot, for any reason, be given, of hyoscyamin, in doses of $\frac{1}{100}$ to $\frac{1}{50}$ of a grain for an adult.

Gordon says that "the time-honored flaxseed poultice should not be used," but recommends the cotton jacket instead. He gives opium at first, to ease the harrassing cough that so disturbs the patient, but advises caution later on, "lest that sensibility that prompts the child to expel mucus by cough be blunted." He says he is aware that good authorities prohibit its use in any and all stages of the disease, but he feels that it is a valuable remedy to give

the patient rest, thereby saving strength, which it will so greatly need later on.

Flint recommends emetics and opium in the early stage of the disease. He leaves, as he does in nearly all that he says about the treatment of diseases, a deal to the good sense of the attending physician, and very properly so, for this is a disease where one must have resources and use them.

In writing this paper my object has been to recommend to your attention a plan of treatment that I think is as nearly a specific as we generally—I think I ought to say, *ever* get in medicine. I know that Dunglison says that probably no such thing as a specific exists, and he is doubtless correct, but by a specific I mean a form of medication that is as likely to lead speedily to satisfactory results as mercury in syphilis, or quinine in malaria. I think there is no remedy that is more of a specific, for any disease, than is veratrum viride in catarrhal pneumonia in children. During the past five years I have used little else in these cases, and in the next five years I expect to find no better treatment.

In years gone by, I was in the habit of using aconite and belladonna, I often thought with good effect, but I have discarded *them* wholly. I do not believe veratrum has anything like the same influence on other forms of pneumonia, and I think to this is probably due the fact that it has at times received such unlimited praise, and at others, such condemnation. I give the tincture in not large, but oft repeated doses, until the pulse is reduced, the respirations lowered, and the whole aspect of the case changed for the better.

I do not hesitate to give it to young, nursing babes, prescribing it in doses from a fraction of a minim to more for older patients, and repeating the dose at least each two or three hours. Dr. W. A. Briggs first called my attention to the remedy for this peculiar condition, and during the past four or five years I have treated many cases with it, and have seen him use it with very satisfactory results.

I shall briefly report the last really grave case in which I used it:

I was called to see a child aged 2 years. I found him breathing about sixty to the minute, pulse very fast. He could not sleep nor rest for the constant cough. He had been ill for one night only, but there were coarse rales over both lungs. He was getting blue, and the case looked like a bad one. All the worse because of the fact that the family know nothing about nursing or caring for the sick. I was fearful about giving veratrum; I thought the safest thing to do was to stimulate, and digitalis seemed to be more appropriate for such a case. I told the family that I was afraid the little one would die, and requested consultation. Dr. W. A. Briggs was called and

advised giving half minim doses of the tincture of veratrum with sweet spirits of niter in syrup of yerba santa, the dose to be repeated hourly. In a few hours its good effect was manifest; in twelve hours the child was very much better, and the next day it had changed to an ordinary case and soon went on to convalescence.

In looking over a few authorities to see if any mentioned the drug in this connection, I find that it is oftener condemned than otherwise. A writer in the United States Dispensatory says: "The patient would usually be better off without it, or the drugs that are combined with it; it only masks or hides the symptoms, and does not cure them." In reply to this, I can only bring a long list of cases where the drug has done all that a drug can do in any disease. I admit that I often combine it with other things, but the remedy is not less satisfactory if I prescribe it, as I often do, from my pocket case with water only.

212 J street.

THE CAUSES OF FREQUENT AND PAINFUL URINATION.

By R. L. RIGDON, M.D.

Read before the San Francisco Medico-Chirurgical Society.

The formation of urine is a continuous process. When taken from the blood it becomes at once a foreign body, so far as its influence upon the general system is concerned, and must be eliminated. Instead of providing for a continuous discharge of this fluid from the body, by means of a direct tube, nature has interposed a half-way station, so to speak, in which the urine collects and in which it remains until permitted to complete its journey. Ordinarily evacuation occurs from four to six times in the 24 hours. The recurrence of this event has been regulated by habit until it adapts itself to the circumstances in which the individual is placed and is conformed to his convenience. Should circumstances not be suitable, the act can be delayed a considerable time, or until the surroundings are more propitious.

Unfortunately, disturbances of the urinary system are quite common, and since this is such a vital portion of the economy, any alteration in its physiological processes is immediately felt. There are many symptoms connected with disease of this system to which the attention of the surgeon will be directed. Some are of minor, some of greater importance. The two following are, perhaps, the ones most frequently encountered: (1) Frequent urination, and (2) painful urination. These symptoms are so frequently present, are so distressing, and often so persistent in spite of treatment, that we will be warranted in spending a short time in their discussion.

In order to appreciate the various relations of these symptoms, it is first necessary to investigate the act of normal urination.

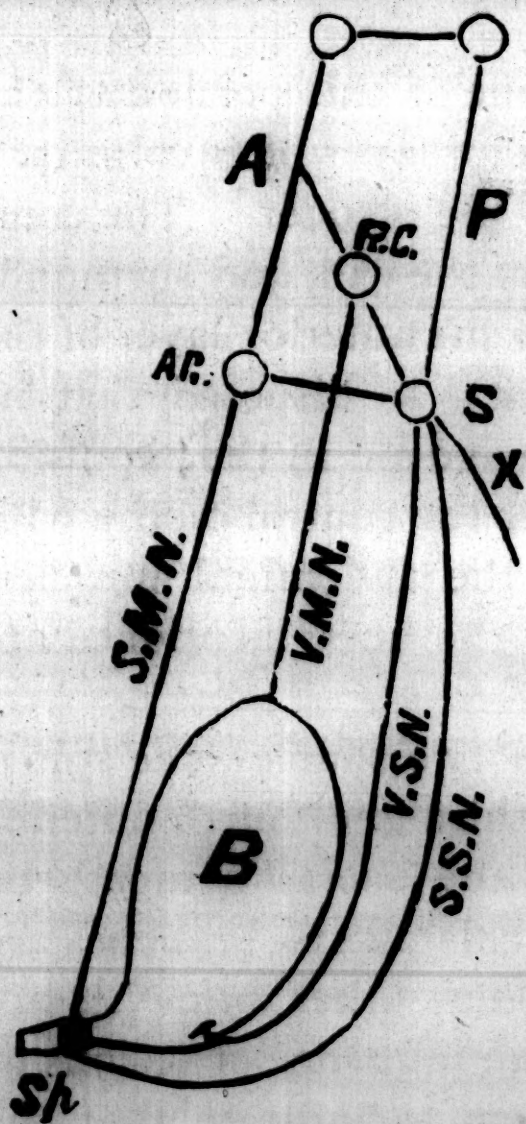
The bladder is made up of a layer of mucous membrane continuous with that of the ureters, pelvis of the kidneys, and the urethra resting upon a sac-like arrangement of involuntary muscular fibers. These fibers are disposed in two principal layers, longitudinal and circular. At the neck of the bladder these latter are most numerous, forming a circular band known as the internal vesical sphincter. The longitudinal fibers are found, for the most part, on the anterior and posterior surfaces of the bladder, and are collectively known as the detrusor muscle. The peritoneum forms a partial serous covering. The prostate surrounds the first part of the urethra, and is largely made up of circularly and longitudinally disposed involuntary muscle fibers. In the apex is found a layer of striped muscle entirely surrounding the urethra.

Immediately beneath the mucous membrane of this portion of the urethra, as well as the membranous, is found a layer of involuntary muscle, continuous with the circular layer of the bladder. The compressor urethræ muscle is under the control of the will, and surrounds the membranous urethra from the prostate to the anterior layer of the triangular ligament. The accelerator urinæ is so disposed that its contractions compress the bulb of the urethra and aid in the expulsion of the last drops of urine. It is also under the control of the will. The remaining perineal muscles, and also the abdominal muscles, are more or less employed in urination, but the ones mentioned are those directly concerned.

The nerve supply to these muscles is from two sources, the spinal and the sympathetic. Parts of the second, third and fourth anterior sacral nerves unite with branches from the sacral sympathetic ganglia and from the pelvic plexus. From this plexus branches are sent along the vesical arteries to the bladder; other branches are distributed to the prostate and urethra. The influence of lesions of the spinal cord upon micturition would seem to indicate that the prostate and penis receive additional innervation through the splanchnic nerves. The perineal muscles are supplied by the pudic nerve. The mucous membrane lining the bladder and urethra is supplied by sensory filaments.

In normal urination, as the urine trickles into the bladder from the ureters, that viscus becomes gradually distended until sufficient pressure is exerted upon the sensory nerve filaments to arouse them to physiological action. This impression is conveyed to the cord and is there translated into a motor impulse that is sent to the bladder, causing it to contract and thus expel its contents. This is

true of the act during infancy, when the sphincters are but little used, but, as the child grows, is influenced more and more by training, and the will begins to be better developed, the different steps in the process become more complicated. The impression that is first conveyed to the cord is reflected to the bladder as before, but the contraction aroused is not of sufficient force to evacuate the urine. As the distension of the bladder becomes greater, more pressure is exerted upon the nerve filaments and the sensations aroused and conveyed to the cord are more intense until, at last, they are of sufficient force to reach the brain, and a conscious desire to urinate is aroused. Through the influence of the brain the vesical contractions are increased, the sphincters are inhibited from acting, and the urine is expelled. These different steps will be better understood by reference to the accompanying diagram:



- B—Bladder.
 S—Sensory center in cord.
 R. C.—Reflex center in cord.
 A. C.—Automatic center in cord.
 Sp—Sphincter.
 V. S. N.—Vesical sensory nerve.
 V. M. N.—Vesical motor nerve.
 S. S. N.—Sphincter sensory nerve.
 S. M. N.—Sphincter motor nerve.
 X—Sensory nerve, general system.
 P.—Sensory nerve to brain.

The irritation first induced in the sensory nerve endings in the bladder mucous membrane is conveyed through V. S. N. to S.; from there to R. C., where it is transformed into the motor impulse, which passes, by means of V. M. N., to the bladder, resulting in contraction. This is all that is required in the infant, but later the mechanism is more complex, and the steps may be explained thus: The first impressions taken to the sensory center in the cord are reflected to the bladder as before, but the contractions are too feeble to overcome the resistance offered by the sphincters, that are now better developed, and consequently more powerful. More intense impressions through V. S. N., caused by greater distension of the bladder, are finally referred to the brain through P, and a conscious desire to urinate is aroused. Should it be convenient at this time to complete the act, motor impulses are sent through A to the mechanism in the cord presiding over micturition. R. C. is stimulated to greater activity;

A. C. is inhibited from maintaining the contraction of the sphincter, the expulsive force upon the urine is greater, the resistance to its exit is less, and the act is satisfactorily accomplished.

Should it be desired to retain the urine for a longer time, instead

of the brain inhibiting A. C. that center is stimulated to greater activity, thus strengthening the contractions of the sphincter and increasing the resistance to the outflow of urine. The entrance of a few drops into the prostatic urethra gives rise to a more intense desire to urinate, and it may be that consciousness of the condition is in this way aroused. The contractions of the bladder are also made stronger by reflexes from this part of the urethra. Usually the abdominal muscles are brought into action and the force thus employed aids in impelling the first drops into the urethra.

By referring to the diagram and remembering what has been said, we can easily sum up the general causes that produce frequent urination.

(a) Any condition that will bring about increased irritability of the vesical mucous membrane, as inflammation, congestion, neuralgia, drugs, etc. As the urine enters the bladder it comes in contact with a membrane that is hyperesthetic—more ready to respond to stimulation. A less degree of distension is required to set in motion the reflex phenomena, and consequently the act is more frequently repeated.

(b) Abnormally irritating contents of the bladder. Given a mucous membrane that is normal, and unusually irritating contents will stimulate the nerve endings and will result in increased contraction and frequent evacuations. It has been determined that the bladder will retain more of normal urine than of any other fluid, consequently any deviation will render it more irritating. This is seen in hyperacidity or the reverse condition, alkalinity; also, in those pathological states in which pus or blood, or other foreign material, is present in solution. Under this heading must also be classed foreign bodies, calculi, for these unduly stimulate the sensory nerve endings.

(c) Increased secretion of urine. Let the bladder be normal and its reflex arc intact and frequent urination may arise, because of an abnormally rapid filling of the viscus, as in diabetes, hysteria, and in diminished elimination of fluid through the integument. This is readily understood. Whenever the bladder contains a certain amount of urine, or reaches a certain degree of distension, micturition occurs. If the bladder refills rapidly the required distension will be soon reached and early evacuation recur.

(d) Diminished capacity. The capacity of the bladder may be diminished to such a degree that a small amount of urine will produce sufficient distension to bring about contraction strong enough to cause evacuation. This arises in concentric hypertrophy or

tumors within the bladder, or pressing upon it from without. Residual urine will also diminish the working capacity.

(*e*) Irritability of the vesical center. Any condition that will produce an undue irritability of the vesical centers in the cord or brain may give rise to the symptoms we are considering. This is rarely seen as a primary lesion, but is usually secondary to some peripheral disturbance.

(*f*) Reflex influences. Many cases of frequent urination will fall under this head. The sacral plexus which supplies the bladder also innervates the urethra, rectum, perineum, and other parts far removed. Implication of any of these branches may manifest itself in disordered micturition. Kidney disease is an example; so, also, is urethral stricture, phimosis and balanitis. A proper appreciation of this fact will frequently enable the surgeon to give relief when otherwise treatment might be almost futile.

(*g*) Mental impressions, as fear, anger. Mental labor, that is associated with worry are prone to produce frequent urination. This is seen in those engaged in hazardous business enterprises where large amounts are at stake.

(*h*) Paresis of the vesical sphincter. The lesion causing this paresis may be either central or peripheral. Tumors, cerebral embolus, tabes dorsalis, are examples of the former. The latter is due to impairment of the sphincter motor nerves. In either case the faulty action arises from disturbances in the reflex arc.

It will be observed that many of these specific causes act in more than one way. Residual urine will not only give rise to this symptom by diminishing the capacity of the bladder, but the decomposition that occurs in it will light up an inflammatory reaction and thus render the nerve filaments unusually susceptible to irritation.

Many of the conditions that give rise to frequent urination will also produce painful urination. In following out the plan of this paper it may be necessary to repeat what has already been said.

The general causes of dysuria may be grouped as follows: (1) Hyperesthesia of the mucous membrane of the bladder and urethra. (2) Abnormal urine. (3) Foreign bodies in the urinary tract. (4) Pressure upon adjacent inflamed parts. (5) Reflexes from nerve-related parts. (6) Implication of the nerve centers.

Under the first heading, hyperesthesia of the mucous membrane, we make two subdivisions (*a*) that of the bladder; (*b*) that of the urethra. The first may be caused by inflammation, either simple, specific or tubercular, congestion, neuralgia, ulcers, fissures, tumors, and prostatic hypertrophy. In simple or gonorrheal inflammation the pain will appear promptly with the onset of the disease, and will

be in proportion to its intensity. In general inflammation the pain will be greatest at the beginning of the act; *i. e.*, when the bladder is most distended and the sensory nerves most strongly pressed upon. If the inflammation is localized at the vesical neck, the pain will be most intense at the termination of the act when the contracted muscle grasps the sensitive membrane. In tubercular inflammation the manner of invasion will have much to do with the production of pain. If the mucous membrane is first attacked this symptom will be present, as in the varieties just described. Should the invasion come through the serous covering, or in the muscular coat, grave changes in these structures may take place before sensory disturbances are noticed. Neuralgia is often irregular in its appearance, and transitory in duration. While it may occur at any time during the act, it is more often felt at the beginning. In many cases but little pain is associated with hypertrophy of the prostate. It is only when the enlargement has attained sufficient size, or is so situated as to interfere with the outflow of the stream or the complete emptying of the bladder, that sensory disturbances are acutely felt. In these cases the pain is usually due to the secondary inflammatory changes that occur. Tumors will give rise to painful urination, chiefly as they are associated with inflammatory changes in the mucous membrane. Ulcers and fissures produce continuous pain, but it is augmented by contraction of the bladder.

(*b*) Abnormal urine. There is a physiological variation in the density and reaction of the urine, but when it passes beyond a certain point in either of these directions it becomes an irritating substance. In some deranged conditions of the general system some of the normal solids of the urine may be relatively increased or diminished, or unusual substances filtered from the blood by the kidneys. Examples of this condition are oxaluria, lithuria, concentrated urine. Pus or blood in solution in the urine may so alter its character as to render the bladder intolerant of its presence. Many drugs, as turpentine and cantharides, that have a selective action upon the pelvic viscera, including the genito-urinary apparatus, are removed from the general circulation by the kidneys, and may render the urine extremely irritating.

(*c*) Foreign bodies. That foreign bodies in the bladder or urethra will cause painful urination needs no explanation, their *modus operandi* is plain. They may be divided into two general classes—those formed within the body and those introduced from without. Under the first variety will be classed the various examples of calculi and gravel, and the vesicles and hooklets of kidney hydatids. Under the second may be grouped a large number of articles, as glass,

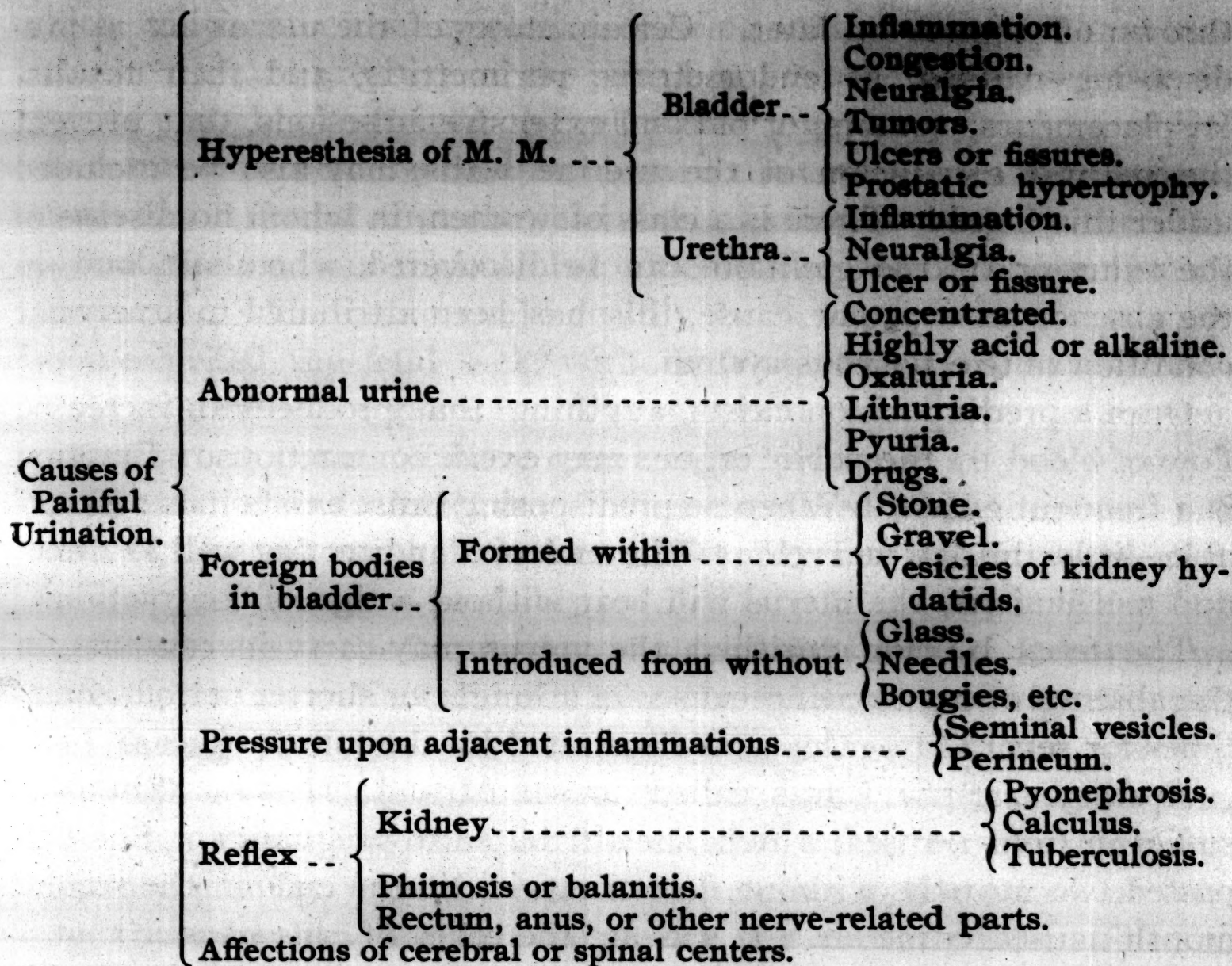
needles, pieces of sticks, broken catheters. One patient, who came to the clinic last year, had lost in his bladder a pencil of fat pork, six or eight inches long, with a string attached. He suffered most intense pain prior to its removal.

(d) Pressure upon adjacent inflammations. Painful urination may arise from pressure of a distended bladder or urethra upon adjacent inflamed parts. Sometimes a vesicula seminale is the seat of inflammation. As the bladder fills and presses more and more upon it, much discomfort is produced. The pain is relieved after the bladder is emptied. It is well to bear this in mind, as the lesion is easily overlooked. Pressure upon a prostatic or perineal abscess may also cause dysuria.

(e) The sensory disturbances that are felt in the bladder and urethra are not always produced by disease of these structures. Both may be entirely normal, and the disturbance referred to them from adjacent parts that are the seat of the disease. Thus, nephritic calculus, tuberculosis, and pyonephrosis may in a reflex manner give rise to painful urination. This may also be said of phimosis, or balanitis, or a morbid condition of the rectum, or anus, or other nerve-related part.

(f) Affections of cerebral or spinal centers. The exact situation of the centers of urination, both in the cord and brain, has not been accurately determined. Electrical stimulation of certain parts of the central nervous system produces evacuation of the bladder. A hemorrhage or tumor in the cord or brain may be the cause of both frequent and painful urination. This is true also of an embolus.

Causes of Frequent Urination.	Hyperesthesia of vesical nerve terminals	- Inflammation. - Congestion. - Neuralgia. - Drugs.
	Abnormally irritating contents..	- Alteration in character of urine. - Additions to urine - Pus. - Blood. - Foreign bodies. - Polyuria. - Hysteria. - Check to perspiration.
	Diminished capacity of bladder.....	- Concentric hypertrophy. - Tumors. - Residual urine.
	Irritability of vesical centers.....	- Tumors. - Excessive venery.
	Reflex influences	- Local -- - Stricture. - Kidney diseases, etc. - General.
	Mental impressions.	
	Paresis of vesical sphincter.	- Central.... - Tumor. - Embolus. - Tabes dorsalis. - Peripheral. - Impairment of motor nerve to sphincter.



The foregoing diagrams will give schematic outlines of the cause of both frequent and painful micturition. Each one of the subdivisions is itself worthy of a separate paper.

Nucleus Building.

ABORTION; ITS CAUSES AND TREATMENT.

By W. R. CLEVELAND, M.D., Biggs, Cal.

Read before the California Northern District Medical Society.

By abortion I mean the premature expulsion of the ovum, and in speaking of its causes I shall not regard the purely arbitrary division into abortion, miscarriage and premature delivery, according to the period in which it occurs.

The causes of abortion are predisposing and exciting. Of the predisposing causes there are certain systemic conditions, that result in the death of the fetus, as excessively high temperature in febrile conditions, the transmission of the poison of infectious diseases from the mother; eclampsia, or the condition which causes it, may result in the death of the fetus, as may also extreme anemia, the result of hemorrhage or disease. The fetus may die in consequence of disease of its appendages, as in syphilitic degeneration of the villi of the chorion; or it may die as the result of violence, direct or indirect; consecutive changes taking place in the appendages, when it is

thrown off sooner or later. Certain states of the uterus act as predisposing causes, as endometritis, perimetritis, and their results. Displacements, tumors, or old and extensive adhesions, that prevent the natural expansion of the uterine walls, may also be included under this head. There is a class of women, in whom no disease of the ovum or of the genitalia can be discovered, who abort, and, in the absence of a patent cause, this has been attributed to a peculiar condition of the nervous system.

Once a predisposition exists, anything that produces an increased flow of blood to the pelvic organs may excite contractions. Emotion is a frequent cause. When no predisposing cause exists it is remarkable—it is almost marvelous—the violence, indirect as well as direct and mechanical, the uterus will bear without a sign of contraction.

The fetus having perished, the uterus may carry its contents, in the absence of an exciting cause, for a longer or shorter period, sometimes for several months, as is illustrated by the following case:

April 30, 1878, I was called to see Mrs. J. H——. She was suffering from nausea, which, she attributed to pregnancy. She had passed two months without menstruation; at the end of the second month nausea came on. It was for the relief of this nausea that I was called, and, prescribing, I heard nothing more from her until the latter part of September following, when, one Monday morning, her husband came for me in great haste. Upon reaching my patient, I learned that on the second day of May she commenced, as she thought, to menstruate again. The nausea was then completely relieved, but a slight color had kept up every day, from that time.

The flow was less than is usual in menstruation, and, so far from weakening her, she had felt better and stronger than for years before, and had worked hard all summer. This Monday morning she was taken with flooding when at the wash-tub. Examination revealed an enlarged uterus, the cervix hard, os somewhat dilated, and a slight oozing going on. The cervix was not dilatable. She had never felt motion, and since the second day of May had not thought that she was pregnant. She was certain that no fetus had passed, and her word could be relied on.

I was confident that she was pregnant, and at about the end of the second month, when I saw her on the 30th of April. That would make it about the end of the seventh month, and the uterus was not large enough for that period, and yet was much too large to suppose that it contained only the remains of a two-months' pregnancy. I tamponed, gave ergot, and next morning met a medical friend in the case who wished the sound passed.

It entered two and one half inches, when it impinged upon some-

thing which gave the impression of being solid. The external hand felt the upward pressure of the sound *in utero*. We agreed that the uterus probably contained the relics of a pregnancy, and he advised that the treatment be continued until the cervix softened. On the tenth day I found that she had been having some pain the latter part of the previous night. Introducing the index finger through the cervix, which now could readily be done, pains came on and soon expelled the fetal sack, with its contents, a two-months' fetus in a mummified condition. The placenta came away after some pretty strong pains. I have seen smaller placentæ at full term. It was hardened and almost dry. This explained why the sound only entered two and one-half inches. The placenta was attached at the fundus, and the sound probably reached it. In its dry and hardened condition it gave the impression of a solid substance. Recovery was prompt, but my patient did not have the same sense of vigor that she had during the time she was carrying this fetus and placenta, although no sub-involution or other genital affection was left behind. She often assured me that she had enjoyed a degree of health during that five months, from the cessation of nausea to the attack of flooding, that she had not enjoyed before for many years. She had borne two children, and had miscarried previously, but the uterine contents had then been expelled promptly.

To illustrate how much meddling the uterus may undergo, when no predisposition to miscarriage exists: In the winter of 1878-9, a physician called me to see his wife, about whom he was somewhat concerned. He told me she was pregnant and that she must be at about the seventh month. There was no motion. There was a constant discharge from the vagina, which had a peculiar appearance and smell.

He gave me this history of the case: They had two children, the youngest eight years of age, and his wife thought these enough, in which view I fancy he coincided. At any rate, when she had passed the second month without being able to disturb matters, he began passing the uterine sound, sweeping it around between the uterine wall and the fetal ball, as far as he found practicable without using a degree of force that might do mechanical injury. This had been kept up for a part of each month, once a day, and sometimes oftener. After a time a muco-purulent discharge had come on, and some days previous to the time I saw her the membranes had ruptured and the waters had come away; since which time a more profuse discharge had continued, which probably consisted of amniotic fluid and muco-pus. No motion had been felt for some time before the rupture of the sac, and no sign of uterine contraction

had appeared. The woman was nervous and somewhat alarmed at the state in which she found herself, but presented no symptom of absorption. Sulphate of quinine, in $7\frac{1}{2}$ -grain doses four times a day, was followed in a couple of days by active contractions, which terminated the case promptly. The fetus was dead and, according to the husband's account, had been so for some time. A prompt recovery ensued.

The following case is an illustration of premature delivery following eclampsia: In January, 1876, I was sent for to see Mrs. E. R——. It was her fourth or fifth pregnancy. She had done well in all her previous pregnancies. This time she was much more fleshy than usual. At about the middle of the seventh month I was sent for, and on arriving found her in a convulsion. She had told her husband she could not see, when he sent for me immediately. The convulsion was severe, and she remained unconscious after it ceased. She was plethoric; the pulse was hard; the face and surface remained dark, and the breathing shallow and unsatisfactory. Abstraction of blood seemed the most urgent indication. I accordingly bled her 16 ounces from a large opening, with the result that consciousness returned, and no more convulsions followed. The next morning the urine containing albumin, and being scanty, she was put upon a milk diet with appropriate treatment. She did not appear to be weakened by the venesection, and complained no more for just two weeks, when I was again sent for. Labor was quickly terminated. The skin slipped from the fetus wherever touched, and the odor of all was offensive. No motion had been felt since the day previous to the convulsion. As soon as the placenta came I irrigated the uterus with a solution of carbolic acid, carrying the tube to the fundus.

I left my patient comfortable, and returned next evening to find her with a temperature of 105° F. Severe pain in the head, back, and limbs; abdomen sensitive, but not tympanitic; little lochial discharge; pulse bounding, hard, and full. My patient was very ill, and the outlook was anything but bright. I sent for a medical friend in consultation, but he was engaged elsewhere and could not come. As the bowels were confined, I gave 10 grains of calomel, applied hot poultices to the abdomen, and then taking my station at the bedside, I gave 1 drop of fluid extract of veratrum viride every half hour until the pulse was compressible and less frequent, the skin moist, and my patient sleeping quietly. At 2 o'clock I went home, returning at 10 A. M. to find her with a facial erysipelas; no abdominal tenderness; lochia returned, and no sign of pelvic disturbance.

She had had facial erysipelas on two previous occasions, and this progressed to recovery as the other attacks had done.

When I left my patient she had obtained relief from pain and was sleeping quietly. Although not feeling quite sure that we were out of the woods, I felt confident that the careful and judicious use of the veratrum had been an important factor in procuring that relief, and that I had been equal to the occasion, when the occasion was a serious one. When I saw that facial erysipelas the next morning I thought that luck would beat science every time. I still believe the veratrum conduced to the comfort of my patient, but must attribute the apparent metastasis to the *vis medicatrix naturæ*.

The treatment of abortion will depend upon the period of pregnancy, and for some reason it is often difficult to learn from the patient anything at all definite on this point. This is not so with all, and when a woman tells me without hesitation that pregnancy must date from about a certain period, I usually find her statement corroborated. But when I am told that my patient is very irregular, so much so that she did not dream of pregnancy when she had passed two months; that she was unwell a little the third month, but went out in the wet or cold, which put a stop to it; she did not think that strange, so irregular is she that menstruation is looked upon as a phenomenon, and when she was taken with flooding she did not know what to think, I expect to find that pregnancy is well advanced. Having attended to any urgent symptom that may present I try to get as detailed a menstrual history of the past five or six months as possible, and unless my patient is a really phenomenal liar it will lead to a pretty correct conclusion. Unfortunately they are sometimes phenomenal, of which the following is an illustration:

In June, 1887, a gentleman called me to see his wife. He told me he thought she was aborting, and feared she was flowing to excess. He thought she was over all trouble last night, but this morning she was feeling very weak, and had lost a good deal through the night. Vaginal examination revealed an os slightly dilated. The index finger failed to reach anything in the cervix, which was soft and dilatable.

This condition gave me the impression that either fetus or placenta had passed. Upon questioning my patient I was assured that nothing had passed but blood and blood clots, which had all been examined. It was evident the somewhat free loss of blood would exsanguinate my patient unless soon controlled, and I proposed to empty the uterus. A neighboring physician was called in who agreed with me that its contents should be immediately removed. The uterus did not seem very much enlarged, but our patient was

one of those who could give no idea of the date that pregnancy occurred; in fact she had not thought she was pregnant.

Having douched the vagina with an antiseptic and prepared my hand, I very easily passed the index finger through the cervix and up to the fundus to find the uterus empty, except for a soft clot in the cervix and the uterine walls relaxed. She had objected to an anesthetic, and in my astonishment I said to her: "And you say that nothing could have passed from you?" She replied: "Impossible; nothing could have passed without my knowledge." The uterus soon contracted upon my finger, expelling it, and giving a hypodermic of ergot, and putting on a compress externally, hemorrhage was soon under complete control. I learned afterwards that she did not think either of the doctors knew what ailed her.

It may be better to make an examination of the case without a preconception of its nature. If we find the os and cervix dilated, or easily dilatable, and nothing presents, we may believe that something has passed away. If the patient has been pretty constantly on her feet, she may be unable to tell whether either fetus or placenta has come away. If hemorrhage continues we should ascertain the actual condition by examination. The rule that if the os is dilatable and the fetal ball within easy reach of the index finger, abortion should be looked upon as unavoidable, seems a satisfactory one.

If contraction is regular and sufficient we may wait for the expulsion of either fetus or placenta, or both. If the membranes rupture, the uterus usually takes a rest upon the delivery of either, frequently of several hours. It has been my practice under these circumstances to tampon the vagina and wait for the return of pain. The tampon should be renewed once in twenty-four hours and the vagina douched with an antiseptic before its renewal. The tampon may consist of a strip of gauze or a bit of cotton flannel, wrapped around a rubber tampon, which is introduced and inflated with water or air. This tamponing has been my practice when my patient has been near me. Some morning I find that pain has been felt during the night and the placenta lies upon my tampon. It may be the first or second day, or it may be a week before this happens. I think it is hastened by giving regular doses of sulphate of quinine, 7 or 8 grains, at intervals of six hours.

At times my patient has lived at such a distance from my office that I could not visit her every day, and in many cases they could not afford to employ a physician to make such trips frequently. On all such occasions I have pursued a course that enabled me to leave my patient with safety. Observing the strictest rules of asepsis and

antisepsis, I have proceeded to empty the uterus at once, usually with the index finger. If the patient objects to the use of an anesthetic, and if we find the os soft and dilatable, we may proceed without one and frequently with but little complaint. If it is hard and firm an anesthetic is almost essential. Having given the patient instruction to avert subinvolution, she may be left feeling that she is in safety. I have pursued this course in many cases and all have done well. Having given the matter a good deal of thought, I have on several occasions more recently proceeded immediately after the expulsion of the fetus and cessation of pains to empty the uterus, usually giving 7 or 8 grains of quinine beforehand.

I think that if one has thoroughly familiarized himself with the principles of asepsis and antisepsis, in practice as well as in theory, and keeps himself constantly prepared to operate in such a case, observing all necessary details, this is by all means the proper course to pursue. It should, however, be borne in mind that talking of microbes and carrying a vial of bichloride in the pocket, constitutes neither asepsis nor antisepsis, and perhaps the only danger in the universal adoption of the practice of emptying the uterus at once, when satisfied that abortion must occur, is that men will undertake it who have not conquered the necessary details, feeling safe because they feel the bottle of bichloride in their pockets.

Once the uterus is completely empty, it is very seldom that hemorrhage continues, or if it does continue, it yields at once to ergot. Cases do occur, however, that do not yield to drugs. As an instance of this kind: some years ago Dr. H—— called me to see a patient of his who had aborted two weeks previously. He controlled the hemorrhage at the time, but it returned every day or every second day until she was quite anemic. He had employed all the usual remedies and without lasting effect. The husband told us this was the fifth abortion in three years. Taking a pocket faradic battery we wrapped one of the brass handled electrodes with iodoform gauze and introduced it into the vagina, well up to the os uteri, and applied a sponge electrode to the abdomen over the region of the uterus, turning on a current that could be felt but that was not painful, for 20 minutes. The hemorrhage ceased at once. We used the current for several successive days, although no hemorrhage appeared after the first application.

At the end of the third month there is very little placental tissue. Sometimes it is attached to the outside of the fetal ball, at others it adheres to its site on the internal surface of the uterus, perhaps so firmly as to require the use of the dull curette. Sometimes previous to the third month the fetal ball becomes ruptured and the very

small fetus escapes, leaving its envelopes. In this case, to avoid putrid infection, they should be removed, and it may here be easier to use the small curette, as it requires little dilatation.

At the fifth month I would not think of risking tamponing after the delivery of the fetus, and waiting for the delivery of the placenta. Previous to the end of the fourth month, while it may not be unsafe when properly done, I think as much risk accompanies it as attends the immediate emptying of the uterus, and that the man who would do the one safely, would be quite as likely to do the other so.

To resume: Previous to the end of the third month, if the fetal ball becomes ruptured and the fetus escapes, leaving its envelopes, and they cannot be seized and removed by gentle traction, they may be removed by the curette, or by the index finger, as seems most convenient.

For the next month the tampon may be used while waiting for the expulsion of the placenta, but its prompt removal gives just as good results and saves time and expense.

This is the treatment of abortion as distinguished from miscarriage. In miscarriage, that is after the end of the fourth month, it is not safe to tampon and wait after the delivery of the fetus, as the uterus is distensible at this period, and hemorrhage may take place internally to such an extent as to seriously compromise the health or even the life of the patient. This is true in a greater degree in premature delivery. Whatever course is pursued, the details of asepsis and antisepsis should be strictly observed.

WILLIAM HARVEY.¹

By LUKE ROBINSON, M.D, San Francisco, Cal.

Read before the California Academy of Medicine.

In this Columbian year, amidst our costly and showy celebration of the birth and labors of the great discoverer, whose heroic achievements gave to humanity a new world with vast expanse of territory and endless resources of wealth, it is meet that we turn our attention to that other great discoverer in the realms of science, whose life work is the beginning of modern medicine. I refer to the illustrious Harvey, the discoverer of the circulation of the blood.

Harvey was born at Folkstone, England, on April 2, 1578. Our future physician was placed, when ten years of age, in a grammar school at Canterbury, and there imbibed his preliminary knowledge

*.*¹ This address was delivered before the Academy of Medicine, by Dr. Robinson, on the occasion of the presentation by him of a handsome etching of Harvey to the Academy.

of Latin and Greek. In 1593, being then sixteen years of age, he was entered at Caius College, Cambridge, graduating in Arts in 1597.

Having selected medicine for his profession, he betook himself to Padua, then the most celebrated school in the world. Here he became the student and assistant of the great anatomist, Fabricius, and here also he listened to the lectures of the world-renowned surgeon, Julius Casserius.

He studied with the utmost diligence, and from the first attracted the marked attention of his teachers, who were surprised at the accuracy and extent of knowledge which he evinced in the examinations preparatory to his doctor's degree. This was conferred upon him April 25, 1602.

He then returned to London, where he settled in practice, and in 1604 married a daughter of Launcelot Browne, a Fellow of the Royal College of Physicians and physician to Queen Elizabeth. Harvey was admitted a member of the College October, 1604, and a Fellow June 5, 1607.

In 1608, having been strongly recommended by King James the First, he was elected physician to St. Bartholomew's Hospital, where he first expounded those original and complete views on the circulation of the blood which have since rendered his name immortal. It was not, however, until 1628 that he gave his opinions to the world at large, in his celebrated treatise, entitled "*Exercitatio Anatomica de Motu Cordis et Sanguinis.*"

From the Christian era until the sixteenth century only two changes had been made in the theory of the circulation. Galen had discovered that the arteries contained blood as well as the so-called vital air or spirit. Linacre, early in 1500, knew that the blood was not stagnant, but had no conception of a continuous circulation, either in the lungs or system. The theory just prior to Harvey's discovery was that one kind of blood flowed from the liver to the right ventricle of the heart, thence to the lungs and general system by the veins, and that another kind flowed from the left ventricle and general system by the arteries. They also supposed that the septum of the heart was pervious and allowed blood to pass in some degree from the right to the left side. Neither at this time was the function of the heart as a motor power in the movement of the blood understood. Silvius had, it is true, discovered the valves of the veins, and Servetus, as well as Fabricius, had described in an indefinite way, the pulmonary or lesser circulation.

It was left to Harvey to enunciate the complete doctrine of the circulation of the blood, as well as to explain and give value to the

discoveries of **Fabricius** and **Servetus**. He illustrated and proved, by numerous **experiments**, that the mechanism of the valves of the veins is not, as then taught by **Fabricius**, to control or check the flow of blood from the heart, but to favor its flow to the heart. Except the discovery of the capillary circulation, the work of **Harvey** was complete. This was described a few years after **Harvey's** death by **Malpighi**, but no one can read **Harvey's** work without believing that even the connection between the arterial and venous radicles was fully made out and understood.

Harvey was fortunate financially in his professional career. He was physician both to **James the First** and his ill-fated son, **Charles the First**. He was also lecturer and physician to **St. Bartholomew's Hospital**, where his best public work was done. His large fortune was left to the endowment of the **Harverian Library** of the **Royal College of Physicians**, which was unfortunately mostly lost in the great **London fire of 1666**. He retained the **Lumlian lectureship**, the duties of which he conscientiously discharged to the last. He had lived to see his grand discovery of the circulation of the blood universally accepted and inculcated as a canon in most of the medical schools of **Europe**, and he is said by **Hobbes** to be the only one who conquered envy in his lifetime and saw his new doctrines everywhere established. He died **June 3, 1657**, at the advanced age of 79 years.

The private character of this great man, says **Aiken**, appears to have been in every respect worthy of his public reputation. Cheerful, candid and upright, he was not the prey of any mean or ungentle passion. He was as little disposed by nature to detract from the merits of others as to make an ostentatious display of his own. He lived on terms of perfect harmony and friendship with his brethren of the College, and seems to have been very little ambitious of engrossing a disproportionate share of medical practice.

533 Sutter street.

MEMORANDA.

A Case of Spina-Bifida.

Very recently I was sent for to see an infant, then 32 hours old, which was said to have a "lump on its back out of which blood was coming." The baby—the third child—was full-term, undersized, but otherwise fully nourished. The labor had been precipitate—"three pains only;" family history good. A large tumor at the level of the dorso-lumbar region, about the size of an adult fist, reddish-purple and opaque, gave ample justification for the remark, "a lump on its back." A thin sanguinolent fluid was oozing from two valvular ruptures situated on the anterior and inferior surfaces of the tumor; this, the mother stated, had been coming away since the child was born. There was

no tension in the sac, which was thick and doughy in consistency and its outer "cuticle" very much modified, being in a state of serous infiltration from constant contact with the fluid. Temperature normal; heart sounds rapid, but pure; pulse tension sub-normal. There had been no movement from the bowels since birth. The anal region was very much congested, but the canal was patent; urine scanty. Child crying constantly, but taking nourishment; anterior fontanelle depressed and toneless. Cephalic development normal, no spinal curvature, but talipes varus in right foot; birth had been head presentation. Prognosis given as fatal, as the cerebro-spinal fluid had freely drained off; sac collapsed; edges of rupture of a greyish gangroid appearance. Convulsions predicted, and six hours later, 48 after birth, the first spasm was noticed, preceded by distinct cyanosis; intensity and frequency of spasms increase. At first, during the intervals, the circulation became normal, the dusky hue passing away. Ultimately, however, the cyanosis became persistent, and death took place 72 hours after birth. A limited *post-mortem* examination was permitted. The sac wall was thick, just like wash leather. It contained about a drachm of dark fluid of fetid odor; lining of sac dusky red; unilocular and sessile. Posterior half of spinal canal of last dorsal and first lumbar vertebra entirely absent. The lining of the sac was apparently a reflection of the dura mater and arachnoid, the distension being in the sub-arachnoid space; as the cord was free and not distended (*i. e.*, normal central canal), lying on the floor of the sac. No doubt when fluid was present it would have floated the cord into the hernia and produced a meningo-myelocoele. The clinical points of interest to note are the rapid labor, the early gangroid appearance of the ruptures, the slight functional disturbance at first, consequent upon the fluid drainage; the delay of convulsive seizures which, in the later attacks, demonstrated both tonic and clonic conditions; motion and sensation in lower half of body apparently normal.

FRED. W. D'EVELYN, M. D.

San Francisco, Cal.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M.D., Sacramento, Cal., and

HENRY GIBBONS, JR., M.D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Results of Conservative Electrical Treatment in Gynecology.—Intra-uterine electrotherapy (faradic-galvanic or sinusoidal), as it is advised by APOSTOLI, wisely, rationally, and patiently applied deserves to be placed at the head of gynecologic therapeutics: (1) Because it most often assures an amelioration of symptoms, which in many cases amount to a cure: (a) It is almost a specific in endometritis and the principal functional troubles (amenorrhea, dysmenorrhea, metrorrhagia). (b) It is very efficacious in even cystic fibroids. (c) Often, but not always, useful in peri-uterine, non-suppurative phlegmasia. (d) Useless in itself in cystic tumors of all kinds, and in suppurative lesions of the pelvis and annexes. (2) Because, in cases in which it is inefficacious, it aids, by its very impotence (through the attention and harmless study of its operative and post-operative reactions) in cleaning up or confirming a doubtful diagnosis, thus imposing or precipitating delayed or forbidden surgical intervention. (3)

Because, if the immediate symptomatic consequences of its application are generally favorable, the remote consequences are not less interesting on account of the ulterior pregnancies often observed.—*Actualité Médicale*, May 15, 1894.

Retention of the Placenta in Tubal Abortion.—The phenomena of tubal abortion may be explained by the anatomical fact that the placenta remains adherent to the tubal wall. When the tube continues swollen and painful after a hemorrhage resembling an abortion; when métorrhagia again occurs without completely emptying the tube, we are authorized in acting upon a diagnosis of incomplete tubal abortion in order to avoid the grave complication of intra-peritoneal rupture. The retention of the placenta in abortion may be explained by anatomical considerations. In normal evolution of the placenta the uterine sinuses progressively enlarge until the close of pregnancy, and, theoretically, these sinuses finally form a single liquid sheet between the maternal and the fetal tissues. Placental detachment is then the normal accompaniment of complete gestation. In abortion, on the contrary, many of these sinuses do not develop, and the placenta remains solidly attached to the uterine walls. Furthermore, after expulsion of the fetus the placenta ceases to grow, and consequently to favor its own expulsion, which depends upon this very growth. In the tube the situation is still more unfavorable, for the tubal mucosa is without the special vasoularization of the uterus, and the sinuses develop with still less facility than within that organ. The placenta is thus expelled piece by piece, accompanied by hemorrhages following menstrual or accidental congestion of the genital organs.—*Progrès Médicale*.

Surgical Treatment of Uterine Prolapsus.—M. RICHELLOT lays down the following general principles in the treatment of uterine prolapsus. Those cases in which fibroma, or lesions of the annexes indicate extirpation of the uterus, are not in question. Here, prolapsus only renders an operation less difficult. In simple prolapsus, if the uterus is small, and exuberance and flaccidity of the walls not extreme, colpography is the treatment *par excellence*; but if the uterus is large, and hypertrophy of the cervix indicates that the weight of the organ may prevent union or cause relapse, supra-vaginal amputation of the cervix—not as performed by Hugnier, but according to the modern method—should precede colpography. If excessive relaxation of the tissues renders the success of vaginal anaplasty doubtful, we may, anaplasty still remaining the basis of the treatment, have recourse to auxiliary methods, to Alexander's operation, or to hysteropexy. In spite of fixation of the uterus, prolapsus often remains unrelieved. Hysterectomy must be considered among auxiliary methods, but it is well to remember the mechanism of prolapsus; it is not the uterus that pushes down the vagina, but the vagina which falls and draws down the uterus. It is true that the extirpation of a large, painful and hemorrhagic body is desirable, and may be more benign and efficacious than supra-vaginal amputation with circular suture of the vaginal wound to the stump; but it is not radical treatment of prolapsus. Hysterectomy is accessory, and necessarily followed by a new operation, and we must assure hemostasis by ligatures to the exclusion of forceps, in order to leave the field free for immediate colpography. Thus, hysterectomy is inferior to a method that succeeds from the first, and, willingly or unwillingly, we must always return to colpography.—*Union Médicale*.

SURGERY.

By T. W. HUNTINGTON, B.A., M.D., Surgeon Southern Pacific Company's Hospital Sacramento, Cal., and

G. F. SHIELS, M.I., C.M., I.R.C.S.E., Surgeon Post-Graduate Department University of California, San Francisco.

Early Operation in Osteomyelitis.—At the recent German Surgical Congress (*Deut. med. Woch.*), KUSTER spoke on this subject. He included in it all inflammation of bone caused by microorganisms, even when the disease does not begin in the medulla, but in the spongy or compact bone, or even in the periosteum. The direct cause of the disease can penetrate through the unwounded skin, but furuncles, etc., are stated to be apparently always intermediary. Scratching, etc., can give rise to the inoculation. The author would regard defective cleanliness of greater significance in the etiology than has previously been believed. Scraping away the disease is recommended as early as the diagnosis is made (the marrow only being scraped away in the severest cases). He refers to 24 cases. Of 14 operated on in the first and second weeks all recovered, 5 after a sinus; of 3 in the third week 2 died and 1 recovered after a sinus; of 3 in the fourth week all recovered, 1 after a sinus; of 4 in the fifth to seventh weeks 2 died, the others recovering, 1 after a sinus and the other with ankylosis of the joint. After a very severe onset the author repeatedly saw, when the focus of the disease was laid bare, a small hemorrhagic infiltration, or a small center of pus, and when this was scraped away the wound healed rapidly. The more extensive the purulent infiltration the more uncertain the result. With an extensive lesion the author carries out the osteoplastic operation after Lücke. In the discussion Nolden did not believe in any relation between defective cleanliness and the disease. Körte referred to 22 cases, 6 of which were fatal. Schede distinguished between the general infection and the more strictly local disease; in the former the surgeon is almost powerless. Linder drew attention to the variability of the disease in frequency and virulence. Sonnenburg thought that the nature of the case must determine the procedure to be adopted. Gussenbauer referred to some 400 to 500 cases. Necrosis occurred in the second stage, and only exceptionally in the first three days. He had no experience of operation in the first stage. Necrosis had not been prevented in his cases.—*British Medical Journal*, June 9, 1894.

OPHTHALMOLOGY, OTOTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

Systematic Procedure in Operations for the Relief of Intercranial Disease Secondary to Ear Suppuration.—URBAN PRITCHARD has formulated the following rules as a guide in operating for intercranial disease secondary to ear suppuration: (1) First thoroughly open the antrum and explore the mastoid cells. (2) Failing to find sufficient evidence to account for the whole of the symptoms, the wound in the skull should be enlarged backward so as to expose the lateral sinus, which should be explored by the hypodermic syringe. At the same time subdural abscesses may be carefully looked for. (3) If a clot be found in the sinus, the internal jugular vein should be tied and the sinus opened and entirely cleared of its contents. (4) If there is any suspicion of cerebral or cerebellar abscess, exploratory punctures may be made above and below the sinus, and pus, if found, evacuated. The author thinks the opening of the mastoid cells of great importance, especially to prevent recurrence of an intercranial affection. In enlarging the skull wound he prefers the

chisel and mallet. Hoffman's gouge forceps are also of great assistance. The important point is to expose the lateral sinus and the dura-matter immediately above and below it, as by this means we obtain access to both the middle and posterior fossæ of the skull, and can explore both the cerebrum and cerebellum if necessary. If thrombus of the sinus is found, the internal jugular vein should be tied below any clot that may be felt in the vein itself. The sinus should be freely opened and the contents thoroughly removed by means of syringe, sharp spoon, etc., free bleeding from the upper end being encouraged; this bleeding can readily be checked by plugging, when we are assured that the contents of the sinus have been evacuated.—*Archives of Otology*.

Syphilitic Inflammations of the Ear.—JONATHAN HUTCHINSON says: "Deafness and facial paralysis, in connection with acquired syphilis, are both extremely rare; the former is rather the more frequent of the two. I have seen several cases of symmetrical, absolute and permanent, deafness in the secondary stage of syphilis. The complication of facial paralysis, although it occurs in exactly the same class of cases and is due to the same character of lesion, is less frequent, usually less complete and more easily recovered from, and I have never seen it on the two sides at once. It is generally curable by treatment. The use of specific measures should be prompt and vigorous in any case of acquired syphilis in which the patient is threatened with deafness. More especially is this true if the deafness comes on in the secondary stage; for it then often runs a rapid course, and if it once has become complete recovery is very rare. It is well to require a patient suffering from secondary syphilis to remain in his bed or room, and use mercury in the manner to get the most rapid effect, when he is suffering with an affection of the organ of hearing. In the tertiary stage of syphilis, when deafness occurs it is of far less importance. It rarely proceeds to extinction of the function and is seldom permanent. One should guard to distinguish cases of deafness due to the condition of the throat during secondary syphilis.—*Archives of Surgery*, April, 1894.

Removal of the Ossicles.—DR. SHEPPARD formulates the following conclusions in regard to this procedure: (1) Cocain can be used with advantage as the anesthetic in a considerable proportion of suppurative and catarrhal cases. (2) Removal of the malleus alone is not, as a rule, sufficient in either class of cases. (3) Removal of the malleus and incus will cure a large majority of the suppurative cases and improve hearing in about half of them. (4) Removal of all three ossicles will sometimes fail to cure middle-ear suppuration. (5) Removal of the stapes entire gives better results than when the foot-plate is left in place, although a moderate proportion of the latter class show very good results. (6) Reactive inflammation seems as likely to occur in cases of partial excision of the membrana tympani as in total excision, with removal of the ossicles. (7) Unpleasant symptoms, such as severe and prolonged dizziness, vomiting, facial paralysis, and meningeal irritation, occur in about a fourth of the cases. (8) In a majority of cases the tinnitus has remained unchanged.—*Annals of Ophthalmology and Otology*.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M.D., Sacramento, Cal.

Treatment of Venereal Lymphadenitis.—NOBLE (*Archiv. f. Dermatologie u. Syphilis*) reported to the Vienna Dermatological Society the results of his investigations into the method of treating venereal lymphadenitis proposed by

Lang. The treatment pursued is as follows: When a case was presented in which abscess-formation had taken place, this was punctured with the point of a bistoury and the contents evacuated by moderate pressure. The remaining cavity was washed out with a 1-per-cent. solution of nitrate of silver driven in with some pressure. This solution was evacuated through the puncture and pressure bandages applied. In very large abscesses two puncture points were made, more efficient drainage being thus secured. This treatment of puncture, evacuation and injection was continued two or three days, until there was no further secretion. This usually required but two injections. At first, after treatment there is a thick, chocolate-colored exudate; finally only blood-stained serum escapes on puncture, and this, if it persistently accumulates, may often be left to absorption. When a case was presented in which abscess-formation was not complete, showing uncertain fluctuation, the injections of nitrate of silver were forced not only into the cavity left by partial evacuation of the pus, but also into the surrounding infiltrated tissue. This causes, in two or three days, a painless softening of the diseased glands, or even brings about a more favorable result—*i. e.*, prompt resolution of the inflammation. The treatment is contraindicated in the strumous form of buboes. These cases require radical operation. In 70 cases treated according to the method just detailed, the average period of healing was 10 days. In 8 cases healing occurred in from 3 to 5 days. In 8 cases cure was not accomplished for 25 to 30 days. In the great majority convalescence was complete in from 5 to 10 days.—*Therapeutic Gazette*, June, 1894.

Recurrence of Hard Chancre.—PROF. NEUMANN presented, at a recent meeting of the Vienna Medical Society, a patient suffering from recurrence of hard chancre at the point of the initial lesion, on the upper lip. The chancre, which occurred after an interval of 4 years, presented exactly the same appearances as the first, and on examination was found to be sclerosed, and not gum-mous. Prof. Neumann believed it wrong to regard the lesions of syphilis as transitory and ephemeral in character. He had become convinced by microscopic examination that, even when all the clinical signs had disappeared, there remained proliferating cells in the tissues, especially along the vessels, and that under certain favorable circumstances these cells might again become active and give rise to a recurrence.—*Universal Medical Journal*, June, 1894.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M.A., M.B., C.M., Professor of Clinical Medicine, University of California, San Francisco.

Chloroform in the Treatment of Seasickness.—Some months ago we published an abstract of an article upon this subject, and since that time PROF. CHARTIERS, Glasgow, has collected three hundred cases reported by ninety ship-surgeons sailing on various Atlantic lines, from which he is able to formulate comparatively definite conclusions as to the value of the drug. (1) In long sea voyages no prophylactic benefit can be secured by the use of chloroform, unless for two nights before embarkation the passenger pays due attention to the stomach and bowels by taking a cholagogue pill. Further, in the case of a person who dreads a voyage, a dose of the medicine should be taken for one or two nights before starting. (2) The diet on board ship should be "pure and dry." Soup, pastry and sweets should be especially avoided, and no full meal should be indulged in. A hypnotic dose (one tablespoonful and a

half for a male, and one tablespoonful for a female) should be taken for three nights. (3) In short voyages, when the steamer leaves, perhaps, at 10 P. M., the passenger should immediately retire to rest and take one of the doses mentioned. (4) In a shorter passage across the channel a teaspoonful should be taken before going on board. (5) By following these directions immunity from seasickness is obtained in the great majority of cases: but if they be not followed, it is to be remembered that chloroform has not any effect in arresting an outburst of vomiting. If it is given in a teaspoonful dose every ten minutes until a tablespoonful and a half, or a tablespoonful, has been taken, it will invariably check retching and depression.—*Lancet*, April 21, 1894.

Peroxide of Hydrogen in Stomatitis.—BOENNECKEN, in a paper on stomatitis, insists upon the importance of paying attention to the mouth during acute febrile or wasting disease; stomatitis originating in the neglect of attention to the teeth or gums, may have a serious influence in retarding convalescence. The solutions of chlorate or permanganate of potash, generally used for cleaning the mouth, are not sufficiently concentrated to have an antiseptic action, and at the same time are apt to be painful. Peroxide of hydrogen is not poisonous; does not cause pain, and has an effective antiseptic action even in solutions so weak as two per cent., or even less. He states that by its use fetor is corrected in a few minutes, and that its continued use was followed by a marked improvement in the condition of the epithelium in twenty-four hours, and complete cure of even severe cases in five or six days. LEO, in the subsequent discussion, stated that a stronger solution was needed in chronic stomatitis.—*British Medical Journal*.

Electricity in Chronic Rheumatism.—MUSSY speaks very favorably of this mode of treatment if carried out patiently and systematically. Treatment must be both general and local—the former by means of the alternating dynamo current in the electric bath, or else by means of statical machines, the latter by the continuous current applied to the joints. The mode of procedure is as follows: When the joints are tender and painful a current of ten to thirty milliamperes is made to transverse them in various directions for a period of from ten to twenty minutes at a time. If movements of the joint are difficult, or if muscular wasting be present, the treatment is to be further extended to the surrounding nerves and muscles, using the negative pole chiefly for them, and interrupting the current frequently to throw the muscles into contraction. Any tender points may be touched with the faradic brush for two or three minutes, or with the positive pole and constant current. The progress is slow but effectual.—*British Medical Journal*.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M.D., Professor of Pathology, Cooper Medical College, San Francisco.

Naupathia or Sea Sickness.—SKINNER formulates the following conclusions: (1) The principal symptoms of naupathia result from the lowering of the patient's arterial blood pressure. This is a condition *sine qua non* of their development. (2) Sea sickness in a person otherwise healthy and not too aged is *promptly curable* in a vast majority of cases. (3) Even an aged person, or in persons having certain affections of the circulatory apparatus, there is often amelioration of the general condition by the employment of the new method of treatment. (4) The treatment consists in the hypodermic injection of from half a milligramme to a milligramme of atropine sulphate, associated with a

milligramme of strychnine sulphate (or nitrate), dissolved in a cubic centimeter of distilled mint water. (5) The administration of these eminently toxic substances demands a great degree of attention, prudence, and supervision on the part of the physician, who alone should be the judge of the opportunity of their administration and of their dose in each individual case. Given at proper times and in suitable doses, however, no harm whatever will follow their administration. (6) The sympathetic nervous system plays a preponderating role in the causation of naupathia. (7) Naupathia, or sea sickness—an affection without known anatomical lesions, and of which the predominant symptoms have their origin in the nervous system, and especially in the sympathetic or ganglionic nervous system—ought to be regarded as a neurosis of the sympathetic. (8) The neurosis may recur during the course of a long voyage, but each attack is almost always amenable to the same treatment.—*New York Medical Journal*, December 30, 1893.

The Kidneys in Pneumonia.—In 180 cases of pneumonia, with 45 deaths, REICHE examined the kidneys in 40 cases, 34 men and 6 women. In these cases no macroscopical changes were evident. Microscopically, however, typical changes could be demonstrated. The changes were embraced under the following heads: (1) The changes involved only the cortex. (2) The changes implicated the secretory parenchyma, leaving the interstitial tissue intact. (3) Exudates were found in the capsules of the glomeruli. In 5 cases, the changes were caryolitic and necrobiotic, whereas, in the remaining cases, the changes implicated the protoplasm of the cells, which were swollen and broken down. These changes were not of an inflammatory but of a degenerative nature. They can be referred, as in cholera, typhoid fever, etc., to toxic, *i. e.*, bacteritic products. The so-called febrile albuminuria in pneumonia is the clinical symptom of these degenerative renal changes, although this symptom may be absent notwithstanding the changes. In the renal parenchyma, pneumococci were demonstrable and accepted as the inciters of the degeneration. The pneumococci could be cultivated on agar, and the cultures infected animals. The writer concludes that the presence of albumin, and even casts in the urine of pneumonic patients is not a *signum mali ominis*, inasmuch as it is dependent on a degenerative process capable of reparation.—*Münchener med. Wochenschrift*.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M.D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

Psychical Disturbances in Diabetes.—DR. JERZYKOWSKI has published an article on psychical disturbances occurring in patients suffering from diabetes, of which he has observed several cases. In one patient, a man aged 50, there was profound melancholia, with attempts to commit suicide, and in another, an old woman, there was also melancholia. In a third case, that of a widow aged 61, there was also considerable mental disturbance. In none of these cases was there any hereditary tendency to insanity. The author also mentions the glycosuria, sometimes occurring after sudden mental shock, as an example of the relationship between diabetes and mental affections. He maintains that in a large majority of cases the mental symptoms are actual complications of diabetes, and not secondary. He states that the most common of these phenomena are alterations in the intellectual powers of the special senses and of memory. The cases of melancholia above noted are less frequently met with.—*Lancet*.—*American Journal of Insanity*, January, 1894.

Diagnosis of Epilepsy by the Urine.—DR. GILLES DE LA TOURETTE claims that a diagnosis between hysterical epilepsy and that due to neoplasm can be made by examination of the urine. He has found that there is an increase in the elimination of urea and phosphates during a convulsion due to a tumor, while the amount excreted during an attack of hysterical epilepsy is diminished.—*Boston Medical and Surgical Journal*.

Antipyrinomania.—CAPPELLETTI reports a case in which the taking of antipyrin had developed an antipyrin-habit. A hysterical woman, 25 years of age, had increased the dose of the drug, taken at first under medical direction for the relief of headache, until she was taking eight grammes *per diem*. Her headache did not improve, but whenever an attempt was made to diminish the dose of antipyrin, an attack of nervous excitement would set in. The physician first tried to reduce the dose suddenly, but nausea and vomiting followed, accompanied by complete anorexia, palor, extreme feebleness of the pulse, general depression, and subsequently convulsions, loquacity, and hallucinations, and he was obliged to resort to slow and gradual diminution of the dose, with administration of chloral, bromide, sulfonal, and prolonged tepid baths. Recovery finally resulted, but was slow and painful.—*Révue Neurologique*.—*American Journal of Insanity*, January, 1894.

When a Physician may Testify Concerning a Deceased Patient.—Chapter 295, Sec. 836, of the New York Code, as amended in 1893, reads as follows: "A physician or surgeon may, upon trial or examination, disclose any information as to the mental or physical condition of a patient who is deceased, which he acquired in attending such patient professionally, except confidential communications and such facts as would tend to disgrace the memory of the patient, when the provisions of section 834 have been expressly waived on such trial or examination by the personal representatives of the deceased patient, or if the validity of the last will and testament of such deceased patient is in question, by the executor or executors named in said will, or the surviving husband, widow, or any heir-at-law, or any of the next of kin, of such deceased, or any other party in interest."—*Journal Nervous and Mental Diseases*.

FORMULÆ.

By GEO. B. SOMERS, M. D., San Francisco, Cal.

Alopecia and Tricophytosis:

Carbolic acid
Chloral
Tincture of iodine....āā 3 iii

S.—Paint the affected parts once a week in alopecia and three or four times in tricophytosis until a strong irritation of the skin is produced.—*Nouveaux Remèdes*.

Furunculosis.—SHOEMAKER uses:

Potassium chlorate
Lactate of iron.....āā gr. xviii
Tincture of columbo... 3 iss
Simple syrup..... 3 iii

S.—Dessertspoonful three times a day.

Muller's Fluid.—This fluid, which is perhaps the most commonly employed liquid for hardening pathological specimens, is made as follows:

Potassium bichromate.. 2 parts.
Potassium sulphate..... 1 part.
Water 100 parts.

—*Medical Record*.

Gonorrhea.—Ichthyol is much used for this affection in Paris. The formula is—

Ichthyol 3 i
Water 3 viii

Three injections daily.—*Medical Press and Circular*.

Diphtheria.—PIEDALLU claims extraordinary success in treating diphtheria by small doses of biniodide of mercury. His formula is as follows:

Syrup	1000.00
Iodide of potassium...	50.00
Biniodide of mercury.	0.50

S.—Teaspoonful every two hours for a young child. Dose is equal to about one-thirtieth of a grain of biniodide and about three grains of iodide of potassium.—*Boston Medical and Surgical Journal.*

Chronic Rheumatism:

Sodium salicylate	
Potassium iodide.....	āā 3 ii
Syrup of orange.....	3 ii
Water.....	3 iv

S.—Four teaspoonfuls daily in water.

—*Medical Press and Circular.*

Cardiac Stimulant:

Tinct. strophanthi.....	m xl
Tinct. zingiberis.....	3 i
Syr. simpl.....	3 iss
Aq. chloroformi.....	ad 3 viii

S.—Two tablespoonfuls three times a day—*Medical Press and Circular.*

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., San Francisco, Cal.

Mortality for May, 1894.—The deaths registered in 77 town districts of the State, during the month of May, in a population of 772,073, correspond to an annual rate of 15 a thousand, the total mortality having been 972. 73 deaths were due to zymotic diseases, giving an annual rate of 1.12 a thousand. Of these, 13 were due to diphtheria, 13 to cholera infantum, 15 to typhoid fever, 6 to diarrhea and dysentery, 5 to cerebro-spinal fever, 7 to whooping cough, 6 to croup, 2 to intermittent and remittent fevers, 3 to scarlet fever, 1 to measles, and 2 to small-pox. 283 deaths resulted from diseases of the respiratory organs, giving an annual rate of 4.32 a thousand. Of these, 168 were due to consumption, 76 to pneumonia, 31 to bronchitis, and 8 to pulmonary congestion; the rate being, for consumption and pneumonia, 2.52 and .48, respectively. 77 deaths resulted from diseases of the heart, 9 from alcoholism, 5 from erysipelas, 35 from cancer, and 424 from causes not given. The average annual death rate from all causes occurring in the ten largest cities and towns in the State, and representing a population of 579,000, was 16.08. The highest rate for the month occurring in cities having a population of 10,000 or more inhabitants, was reported from San Francisco, the lowest from Berkeley.

METEOROLOGY.

Summary for May.—*Temperature.*—The normal temperature of the State for May is 64°, the average for May, 1894, was 63°; a departure from the normal of —1.0°. The highest monthly mean was 88°, at the Agricultural experiment station near Tulare City; lowest, 43°, at the Summit, in the high mountain regions; the maximum, 111°, at Salton, on the 6th, in the desert regions of Riverside county; the minimum was 18°, at the Summit, on the 16th. The greatest monthly range was 68°, at Tulare; the least, 26°, at Point Reyes and Point Lobos. The absolute range in the State was 93°.

Rainfall.—The normal precipitation of the State for May is 0.89 inches; the average for May, 1894, was 1.21 inches; a departure from the normal of +0.32 inches. The greatest monthly precipitation was 5.64 inches at the Kennedy Gold Mine, near Jackson; the least, nothing, at a number of stations.

Wind.—The prevailing direction of wind was westerly.

Unusual Features.—The unusual meteorological feature of the month was the continued abnormally low average temperatures over the entire State, making the weather appear more like early fall than spring.—JAMES A. BARWICK, Director California Weather Service.

California—Tabular Statement for May, 1894.

Departments.

STATIONS.	TEMPERATURE.						RAINFALL.	Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean.....	Highest	Lowest.....	Mean High- est.....	Mean Low- est.....	Mean Daily Range			No. of Clear Days.....	No. of Fair Days.....	No. of Cloudy Days.....		
Auburn	64.3	90.0	43.0	65.0	49.0	16.0	2.77	83.0	13	9	9	S.W.	Southern Pacific Company.
Berkeley.....	55.0	75.0	42.0	65.0	49.0	16.0	2.01	83.0	13	9	9	S.	Obs. University of California.
Colfax.....	60.4	86.0	32.0	56.0	46.0	11.0	3.45	94.0	10	14	7	S.	Southern Pacific Company.
Eureka.....	51.0	63.0	36.0	56.0	46.0	11.0	1.31	51.0	15	13	2	N.W.	Weather Bureau Dept. Agr.
Fresno.....	68.0	95.0	40.0	82.0	54.0	28.0	1.16	18.0	27	4	0	N.W.	"
Indio.....	79.0	100	58.0	92.0	66.0	26.0	T.	80.0	5	20	6	W.N.W.	"
Los Angeles...	60.0	80.0	46.0	70.0	50.0	20.0	0.20	80.0	5	20	6	W.	"
Monterey	58.6	74.0	42.0	65.0	49.0	16.0	1.86	56.0	12	12	7	S.W.	Southern Pacific Company.
Napa.....	63.0	83.0	40.0	74.0	52.0	22.0	1.49	76.0	17	3	11	S.W.	Station Napa Insane Asylum.
Oakland.....	57.0	79.0	40.0	68.0	50.0	18.0	1.89	76.0	17	3	11	W.	Chabot Observatory.
Paso Robles....	67.7	95.0	45.0	78.0	55.0	23.0	1.15	56.0	18	7	6	W.	Southern Pacific Company.
Red Bluff.....	67.0	95.0	43.0	74.0	53.0	21.0	1.46	64.0	15	8	5	N.W.	Weather Bureau Dept. Agr.
Sacramento....	64.0	88.0	40.0	78.0	55.0	23.0	1.70	70.0	20	6	7	S.W.	"
San Bernardino	63.0	87.0	38.0	78.0	48.0	30.0	0.56	80.0	14	10	7	W.	A. K. Johnson, M. D.
San Diego.....	59.0	70.0	45.0	62.0	55.0	7.0	0.09	87.0	11	8	12	W.	Weather Bureau Dept. Agr.
San Francisco..	55.0	72.0	44.0	61.0	50.0	11.0	1.31	76.0	11	11	9	S.W.	"
Santa Barbara..	58.0	74.0	46.0	64.0	52.0	12.0	0.91	76.0	11	11	9	W.S.E.	Hugh D. Vail.
Santa Cruz.....	59.0	85.0	37.0	70.0	48.0	22.0	2.36	36.0	13	2	16	S.W.	W. R. Springer.
Yuma.....	77.0	102	50.0	93.0	61.0	32.0	T.	36.0	23	8	0	W.	Weather Bureau Dept. Agr.

T. means a trace of rain.

Blank (----) indicates data missing.

Occidental Medical Times.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: JULY, 1894.

THE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

The forty-fifth annual meeting of the American Medical Association is conceded to have been in every way a success. Scientifically the sections were, as a whole, well attended, the papers numerous and of fair average character. Sections that were poorly attended, or that failed to organize, are usually in much the same position. The attendance at the meeting was larger than at several that have been held in eastern states. Including visitors and the ladies who accompanied the Association, there were about 1,200 persons in attendance. The total number who registered was 571, of whom 492 paid dues and 79 produced certificates of membership. The actual gain in membership has, therefore, been considerable, and, as we have ventured to predict, a large proportion of this will be permanent. At another time we shall give more precisely the gain to the Association from the Pacific coast states and territories.

The meeting of the Association on the Pacific coast after an absence of twenty-three years, was an event of widespread interest. The Association came to find a small guard of occupation that had held its ground for many years, some having joined on the occasion of the last visit. It has left us with renewed vigor, strengthened in its membership by the infusion of the healthiest professional blood to be found in this country, and with a tacit understanding that its coming will not again be so long postponed. That the profession on this coast, the cause of professional organization, and the progress of medicine, has been greatly benefitted, is apparent. Medical societies received a marked stimulus during the past year; new societies were organized; older ones, that had died from lack of interest, were revived, whilst those in more active existence gave signs of unwonted vigor. To many of the profession the Association was only a name or a memory, to these it is now a living reality whose influence cannot but be helpful in future years. The

American Medical Association to-day fully and amply represents all that is best in the profession of this country, and for general practitioner or specialist there can be no better organization for mutual help or for scientific or professional advancement.

This meeting of the Association derived a large share of importance from the fact that at it was to be considered the proposed amendments of Constitution and of Code. It is said that many eastern members remained at home, realizing that abrogation of the basic principles, of the Code at least, were impossible in the clearer ethical atmosphere of California. It is true that on either of these questions the profession here are not well informed, but it needed but little explanation to perceive that the abolition of the delegate system in general sessions and the destruction of the nominating committee would work an irreparable injury to the whole profession of the western states, amongst whom the Association had for so many years shown a selfish disinclination to meet. A later proposition to amend this plan by providing for mixed representation on the nominating committee left things precisely where they stood as far as voting power is concerned, the delegates who could be counted on as being present making a minority in the face of a, presumably, solid majority. A further proposition to permit delegates, after two successive years, to vote at all future meetings, only postpones the evil while rolling up an ever-increasing majority of those seeking control. The inevitable consequences of these measures would be to place the business control of the Association in the hands of the specialists, and to permanently exclude the majority of the membership from representation. The changes proposed in the Code were, as we have already pointed out, of a very radical character. In their very nature they are destructive of the principles upon which the Code is founded and which have, more than anything else, served as a rallying point, for all the years of its existence.

The arguments advanced by the supporters of revision of Constitution and Code were identical. Present conditions were urged as the cause of the Association's slow growth and its numerical insufficiency in relation to the whole profession. One eloquent speaker presented the picture of the British Medical Association with a membership of "20,000" and a flourishing and influential Journal, and urged the possibility of uniting the "100,000" practitioners in the United States in one grand association. This sounds very well from

the platform, but the premises are false and the practical accomplishment of such an aggregation is utter nonsense. In the first place, the total membership of the British Medical Association, covering the entire British possessions, is considerably short of 20,000. The exact figures are not at hand, but the *Association Journal* only claims a circulation of 18,000, and we are unaware of any publication that would misrepresent itself in such a manner. The contention that there are 100,000 physicians in the United States that are eligible for membership, will be seen, on a little reflection, to be equally misleading. The third edition of the Medical and Surgical Register of the United States gives the membership of physicians as 105,000. From these must be deducted the unqualified, the poorly qualified, the 'pathists, and those debarred for various reasons. Admitting, for argument, that there are 50,000 physicians to-day that are eligible, it is as fallacious to assume that even that number can be brought into the Association by changes in Constitution or in Code as it is to assert that a fairly efficient Constitution and an exceedingly liberal Code holds them aloof. Those who adopt such arguments fail to read the history of the profession and of its organizations. The largest figure that can be counted upon is that, the units of which, alone, are eligible, viz: the combined membership of the State and local Societies. Here, again, history shows that the membership cannot be at once extended to embrace even this constituency. The history of every State Society and of most local Societies shows a comparatively small proportionate representation when compared with the constituency from which it could draw. From time to time spasmodic efforts are made to remedy this, and with only a partial measure of success. Many sincerely believe that they have discovered a cause in various conditions, but the great truth remains that in every community there are only a few who actively and earnestly seek and support scientific advancement and professional organization. These men now comprise the membership of the local and State Societies. If, as has been proposed, the Association at once include this number in its ranks, the element of expense may be considered by some, and, aided by indifference or lukewarmness, the aggregate continuing in the Association year after year would fall far short of the anticipation.

The social features of the meeting were certainly not neglected. In the face of an extensive commercial depression a large sum of

money was raised, exclusively amongst the profession. Most of the leading medical societies contributed liberally, and individual donations were also generous. It seemed at first as if there might be some friction on the question of entertainment, but differences that had arisen through misconception were soon smoothed out and everything was harmonious at the time of meeting. Entertainments were provided for all the visitors, and in these the local profession participated most heartily. The ladies were not forgotten; special entertainments being provided for their benefit, and in fact a special organization had been effected to render their stay amongst us as enjoyable as possible. Had not the time been so fully apportioned there would, no doubt, have been several additional private entertainments, but in the short space of four evenings it was impossible to find room for all. It is, perhaps, invidious to mention any one entertainment as excelling another; yet it will be conceded that the reception by the Medical Department of the University of California was an occasion that will long be remembered by the profession at home as well as by their visitors from abroad. The excursion tendered to the Association by the profession of California was a most enjoyable one, in which every detail seemed to have been carefully supervised, and during which nothing occurred to mar the pleasure of the occasion. In fact, the meeting as a whole, whether viewed from its scientific or from its social aspect, leaves only pleasant memories, and all concerned in the entertainment of the guests must feel repaid by the universal satisfaction expressed on all sides.

It would be unfitting that we should close without some reference to the one man who did most and worked hardest to make the meeting of 1894 an assured success. DR. R. H. PLUMMER, the Chairman of the Committee of Arrangements, as an officer combines a large measure of executive ability, with an apparently unlimited capacity for hard work. To fill his position in a satisfactory manner is at any time an unenviable task, but to undertake this work in a locality where the Association had not met for almost a quarter of a century, and where all were ignorant of the necessary machinery, as well as the ways and means for conducting a meeting, was certainly a task of no small proportions. That the chairman acquitted himself well and successfully has been conceded on all sides. Throughout the meeting there was never a break down in programme or

arrangements. Things at times moved slowly in the Registration Bureau, but this was due to an attendance much larger than any had anticipated, and the machinery was simply inadequate to the demands upon it. Even here there was no mishap, and no committee worked harder and more faithfully than that on Registration. We have not inferred that any one failed in his special duty, or that any officer was lacking in devotion to his task, but it is idle to deny that the unmixed pleasure of a grand success was mainly due to the unceasing and untiring efforts of DR. PLUMMER, whose only reward has been the emphatic thanks of all concerned.

NOTES.

Dr. G. L. Simmons.

Dr. G. L. Simmons, of Sacramento, the President of the State Medical Society, left for a prolonged vacation on June 17. The doctor, who had delayed his departure until after the meeting of the American Medical Association, will first visit his old home in Massachusetts, and, having spent some time in eastern cities, will then probably extend his trip to Europe, returning some time before the meeting of the State Medical Society, in 1895.

The Strange Tale of the Inverurie.

On June 19 the British barque Inverurie reached San Francisco, after a sixty-four days voyage from Sidney, and with the body of the Captain's wife on board, she having died two days before reaching port. The story, as published in the papers and authenticated by inquiry, is a strange and melancholy recital of human suffering. When the ship was about to leave Australia, Captain Willox states that he urged his wife, then about seven months pregnant, to precede him by steamer, so that she could obtain proper medical attention. Mrs. Willox, however, preferred to accompany him and shortly before starting a man named Armitage, accompanied by a woman who passed as his wife, applied for passage. Armitage stated that while not qualified he had had extensive experience in midwifery, whilst his "wife" had served as a trained nurse in the hospitals at Sidney. Their services were accepted and they took passage on board. All was not harmonious on the ship; charges and counter-charges were made by officers and crew. In the unpleasant feeling that prevailed, it appears that the captain and second officer were on one side, with the mate and ship's company against them. Mrs. Willox' health appears to have been good while on the voyage, and in due course labor set in. According to one side of the controversy

the captain had been drinking, and under the excitement he became more violent and demonstrative. Delivery was delayed and it appears that instruments were used. During the progress of the case the supply of chloroform gave out and the sufferings of the woman almost determined the captain to shoot her so as to put her out of her misery. He, however, did not carry out his expressed intention, but, apparently in a condition of frenzy, attacked the second officer, with whom alone he seemed to be on friendly terms. The mate then took the responsibility of ordering him into confinement and under restraint, where he was kept, while the man Armitage, assisted by his "wife" and the mate, effected the delivery of a living child. The captain was kept in confinement for some days, but his wife's condition becoming serious, he was released, as he states, too late for her to recognize him before she died. The stories as to the cause of the captain's condition are conflicting. Armitage and the mate stating that it was from drinking, the captain alleges that it was due to drugs with which he had been plied. The only person supporting the captain in his assertion is the second officer, who says that in eight months he never saw the captain take a drink. Upon the arrival of the ship the body of the unfortunate woman was taken ashore, and subsequently an autopsy was made by Dr. R. J. G. O'Connell, of the Coroner's staff. He reports that death was due to puerperal peritonitis and that nearly one-third of the placenta had been retained *in utero*. The whole affair is a most melancholy and unfortunate one, and it is impossible to regard the captain as innocent in the matter. The mate obtained his discharge from the ship, his character being given as "first class," whereas, under the circumstances, a most searching investigation should have been called for. In addition to this, a number of the crew have stated most positively that they will not go to sea with Captain Willox in command.

The Seligman Case.

Our readers will remember that some weeks ago Mr. Jesse Seligman, a New York banker, died rather suddenly at the Hotel del Coronado, San Diego. Mr. Seligman was prominent in the financial world, and his sudden demise excited a good deal of press comment. Following this, there appeared a number of statements ascribed to Dr. H. R. Heydecker, the resident physician who had attended Mr. Seligman during his last illness. The general purport of these statements was that the patient was suffering from extensive cardiac and renal trouble, and that he had been sent to San Diego by Dr. Alfred L. Loomis, of New York, who had stated that Mr. Seligman

was not the subject of any organic disease, but was simply suffering from overwork and general prostration, and needed rest. An interview with Dr. Heydecker, that appeared in the *San Francisco Examiner*, was particularly strong, the doctor being quoted as expressing his surprise at the ignorance or carelessness displayed by the author of "Lessons on Physical Diagnosis." Dr. Heydecker's side of the case having been confirmed by an autopsy, the status of the case, as well as its clinical aspect, excited a great deal of comment in the profession. The following statement, kindly furnished by Dr. Heydecker, fully explains his position, and at the same time illustrates in a remarkable manner the trend of modern "journalistic enterprise." The doctor states that, owing to the strongly-expressed wishes of the Seligman family, he is prevented from giving more than a statement of his conduct in the case, as well as the report of the pathologist who examined the body. Dr. Heydecker says: "The articles which appeared about ten days apart in the *San Diego Union* and the *San Francisco Examiner*, respectively, and which purported to have been the result of interviews with me by reporters of said papers, were neither uttered by me, nor was even their existence known until I saw them in print. The first-mentioned article I have traced to a fellow physician who was called in during the last few hours of my patient's life to assist me. The second and most obnoxious newspaper report was manufactured by a reporter, to whom I had absolutely refused an interview, and who had given me his word, on hearing my reasons for this refusal, that he would publish nothing. The above statements I have been able to prove to the entire satisfaction of the family and of the physician, whom the paper tried to represent me as accusing of an error in diagnosis. As both these parties have been satisfied with the proof which I was enabled to bring, I shall not occupy your valuable space with the production of details. I always have had, and still have, the greatest respect and most friendly feeling for the physician I am represented as assailing. Regarding the case, I have only to say that a most careful pathological examination, made at the request and with the sanction of the family, has corroborated, in every particular, the diagnosis made by me and confirmed by Dr. William A. Edwards, of San Diego, who saw the case with me in consultation, and who was present at the autopsy. I quote the following from the report of T. Mitchell Prudden, Professor of Pathology in the College of Physicians, New York: 'The anatomical diagnosis, so far as it can be made from my microscopical and limited gross examination, is: chronic endarteritis and endocarditis; chronic diffuse nephritis, with

supervening acute exudative nephritis; congenital cyst of kidney; adenoma of the kidney, probably of supra-renal origin.' The only other point of interest to the profession is the nature and rarity of the above-mentioned adenoma. I will quote again from the report of Dr. Prudden: 'The kidneys show microscopic changes which were alike in both. There were numerous bands of moderately dense fibrous tissue extending from the capsule into the organs, among the lines of the interlobular arteries. New-formed tissue of similar character was present in variously shaped larger and smaller patches. In these bands and patches of fibrous tissue, glomerular tufts and their capsules were converted into dense fibrous nodules; the kidney tubules were atrophied, while in their vicinity the convoluted tubules showed dilatation of the lumen and flattening of the epithelium. In addition to this distinctly chronic process, there were present in both kidneys a marked swelling of the tuft epithelium, and a collection in varying—never very large—amounts of pus cells and granular material and hyalin casts in the renal tubules. The epithelium of the convoluted tubes was not sufficiently well preserved to enable me to ascertain the presence or absence of parenchymatous degeneration. The kidney tumor. Aside from the parts of which are necrotic and which are the seat of hemorrhage, the tumor consists primarily of a series of anastomosing and more or less closely interlacing thin-walled blood-vessels. Some of these vessels are accompanied by a narrow sheath of connective tissue which sends off prolongations on every side; some, on the other hand, are accompanied by a scarcely visible connective tissue investment. This vascular and fibrous tissue forms the stroma of the tumor. The alveolar interspaces between these vessels and connective tissue trabeculae are of the most varied sizes and shapes, and are largely filled, sometimes loosely, sometimes densely, with polyhedral, often elongated, cells, with large nuclei. Many of these cells contain distinct fat droplets; many are transparent or but slightly granular. They are in places packed together without apparent stroma. On other places, delicate fibrillar projections from the vascular sheaths pass in between them. In sections of the tumor cut in certain directions the large cells, instead of occupying distinct spaces such as are commonly called alveoli, form a distinct investment of the vessels in two or more fairly distinct rows. The tumor is in many places colored by blood pigment as the result of old interstitial hemorrhages. Sections cut through the capsule of the tumor show that although generally closely inclosed by this fibrous investment, the characteristic tumor tissue has formed fresh

foci outside its original situations. Sections made through the junction of the kidney and the tumor, show that while intimately joined by the mergence of their respective capsules, the tumor is distinct from the kidney, the latter being squeezed and atrophied where they join, but showing no growth similar in structure to that of the tumor. The tumor, in my opinion, originated either in the supra-renal capsule or in some supernumerary structure of the same nature which may have been originally attached to the kidney or situated outside of it.' " This is Dr. Heydecker's side of the case and it effectually disposes of the presumption that he had in any way questioned or even discussed the opinions that may have been held by Mr. Seligman's former attendant. Mr. Seligman, for some three years prior to his death, had been under Dr. Loomis' care as an office patient. During this time it was recognized that he was suffering from general fibrosis accompanied by an hypertrophied and dilated heart. Recently the patient had become anemic and was in addition suffering from some obscure and painful affection of the jaw, and it was in consequence of these complications that he had been advised to seek rest and a warmer climate. The moral of the tale is that in the discussion of matters medical the newspapers are sometimes a trifle inaccurate.

The Case of Mrs. Martin.

It is very true that "truth is stranger than fiction," and that the incidents of every-day life often transcend in vivid realism the strongest tales of the imagination. This is strikingly illustrated by the Martin case that some weeks ago filled columns in the daily papers. The facts are briefly these: A Mrs. Martin, of New York, who had been suspected of mental trouble of a mild character, one day left her home in an unexpected manner, taking with her her son 5 years of age, and at once disappeared so completely that all efforts on the part of her husband to find the estrays were unavailing. The lady was possessed of ample private means, and aided by an attorney whose conduct in the case seems inexplicable under any circumstances, she successfully eluded pursuit. Her husband made several journeys to Europe, and visited many places on the continent. He traveled to various parts of the United States always to be disappointed, and on one occasion he even made a journey to Australia, only to find that the chase had flown. Finally, after three years of anxiety and suspense, Dr. H. R. Heydecker, now of San Diego, California, but formerly the medical adviser and a friend of the Martin family, by the merest chance encountered Mrs. Martin in an elevator at the Palace Hotel, in San Francisco. The lady had just arrived from New Zea-

land, and was about to start on another long journey. The following notes of the case, which have been furnished by Dr. Heydecker, are exceedingly interesting: "In the latter part of June, 1891, one of my patients, a lady about 42 years of age, who for a number of years had given evidence of delusional insanity, suddenly disappeared from her home in New York, taking with her her 5-year old son, and leaving behind a husband and a daughter then 7 years old. For more than three years, in spite of every effort to ascertain their whereabouts, this mother and child wandered over the face of the earth, and successfully eluded pursuit. Prior to her sudden departure from home nothing unusual had occurred to lead the family to suppose that she contemplated flight, although for over a year she had imagined herself the subject of persecutions at the hands of her husband. In order to explain how a woman and child could wander about the earth without being discovered, and a father be thus deprived of the possession of his child, it will be necessary to briefly state two or three facts concerning the laws of the State of New York: (1) Other things being equal, minor children of parents not living together belong to the parent who for the time being has possession, and unless the other can cite the possessor before the Supreme Court and show some good grounds, either moral, financial, or mental, why said children should be removed from the custody of the one having them in charge, the Courts will not interfere. (2) An attorney acting for a client not only cannot be compelled, but is absolutely forbidden to reveal the whereabouts of said client against their will. (3) In order to prove to the Courts that the custodian for the time being of the child's person is either morally, financially, or pecuniarily unsuitable for the custody of the child, said custodian must be duly served and cited to appear before the Supreme Court in the county in which they claim residence. From the above it will be seen that unless the wandering mother, who was suspected of insanity, could be found and served, the other parent had absolutely no means of obtaining the person or the care of his minor child. As the mother in this case was possessed of ample means in her own right which, according to the laws of the State of New York, she could dispose of at will, without the knowledge or sanction of her husband, and as her attorney absolutely refused to reveal her whereabouts, the father was effectually debarred from obtaining possession of his child, unless he could find the mother and child, and in some way get them within the jurisdiction of the State and county of New York. This, after three years fruitless labor, was accomplished through my chance meeting with the mother and child in an elevator

at the Palace Hotel in San Francisco. As the mother had committed no crime in the eyes of the law, and as in spite of the fact that her mental condition was suspected by all the members of her family, she had not been properly adjudicated insane, I could obtain no assistance from the police authorities, and was, therefore, compelled to rely upon my own ingenuity, and that curse of civilized society the private detective, to retain possession of the person of the woman and child until the father could come from the east and either take possession of his child by force, or induce the mother with the child to travel back to New York. Armed with telegraphic authority from the husband to act in this matter as his representative, I proceeded to devise a plan whereby I might with the least possible notoriety, and the minimum of cruelty, hold the mother and child until the already almost crazed husband should arrive. Thanks to the courtesy of the hotel authorities, and the influence which a reputable physician possesses over his patient, and more than all to the courtesy and confidence of Dr. W. Watt Kerr, of San Francisco, I accomplished this result in spite of the almost insuperable opposition offered to my actions by the agents of the one person who was the gainer by the woman's absence from her friends and her husband. Stating the case to the hotel authorities and to Dr. Kerr, who had been approached and requested to investigate the matter by the other side, I was permitted to have the mother and child kept in their room under guard, on the averred grounds that she was suffering from a mental ailment which demanded complete and absolute rest and freedom from outside influence. The details of the eight days during which I held the mother and child, and the causes which led to my sensational flight from San Francisco, with the subsequent reunion of the parents and children, I will not enter into here, from the fact that they have been so thoroughly described in the daily papers, and also because it is of no interest to the medical profession. My patient being persuaded to return quietly to New York with her husband, a commission was obtained from the Supreme Court to examine into her sanity, and being found a sufferer from delusional insanity due to a chronic inflammation of the cortex, she was by said commission, sitting before the Sheriff's jury, found insane and incapable of caring for her property and her child. A commission for guardian was appointed to administer her estate, direct the care of her person, and determine upon the proper custodian of her children. This was the culmination of my relations with the case, and fully justified the means I had employed in accomplishing this much desired end. Through a two years' connection with

the above-mentioned lunacy commissions, as Medical Commissioner in the county of New York, I was enabled, through my knowledge of the lunacy laws of the State, to carry out a difficult piece of medical detective work; and in spite of the numerous disagreeable features, and the still more offensive newspaper notoriety that I was forced to endure, I have been thoroughly compensated for it all by the happy outcome of the case."

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, May 15, 1894.

The President, W. F. WIARD, M.D., in the Chair.

Permanent Quarters and Revision of Fee Bill.—The Committee on Permanent Quarters for the Society and on Revision of the Fee Bill, reported against any effort to procure permanent quarters for the Society at present and until the regular average attendance should be twenty or over. On revision of the fee bill, the committee reported in favor of the adoption of certain specific charges to replace the present general provisions. These fees covered the more common surgical emergencies and were, with some modification, adopted by the Society.

American Medical Association.—The Committee on Subscriptions to the Entertainment Fund of the American Medical Association reported that so far about \$350.00 had been collected and that there were yet some members to be seen.

A New Obstetric Forceps.—DR. W. A. BRIGGS exhibited a pair of long and a pair of short obstetric forceps. They were improvements and modifications of those which he had already exhibited to the Society on other occasions. The distal portion of the fenestra of the blades in these instruments had been made solid, and the axis traction attachment had also been simplified. The handle of the forceps had been modified to admit of axis traction when applied to the sides of the head, as well as in the usual manner where axis traction can only be applied with the blades in the axis of the pelvis.

DR. H. W. STRADER read a paper on "Chloroform in Anesthesia," in which the author advocated this anesthetic as more suitable for all cases, more convenient, more certain and, when properly administered, quite as safe as ether.

DR. T. W. HUNTINGTON said the subject of ether and chloroform anesthesia had occupied the attention of surgeons for the past 50 years. Opinions of authorities differed greatly on the questions of safety and of expediency. In the main ether was the safest. In the experience of every surgeon there occurred deaths that were inexplicable unless due to chloroform, as there was no other possible cause. In the *British Medical Journal*, which published the deaths due to chloroform, it seemed as if every number contained a fatality. On the other hand, we rarely see a death recorded as due to ether. In certain cases it was true that death occurred at a later period after ether anesthesia, but these were not recorded. It was urged that special skill was demanded in the administration of chloroform, but this was equally true where ether was used. The speaker used the improved Ormsby inhaler and had found it most satisfactory. In administering ether he had observed that in the later stages of anesthesia, when the breathing at times became shallow and irregular, that by making the initial incision the reflexes were excited and the breathing became rhythmic. There was no doubt that chloroform could in many cases be used to advantage.

DR. A. M. HENDERSON: In watching the pulse during the administration of chloroform it is generally thought that the heart stops beating before respiration ceases. The Hyderabad Chloroform Commission, appointed to investigate

this point, reported adversely, and stated that the respiration stopped before the heart had ceased to beat, the latter sometimes continuing to act for several seconds.

DR. W. A. BRIGGS: Statistics bear out the fact that chloroform is the more dangerous anesthetic. On these grounds I use ether.

DR. C. E. FOWLER said, personally, he had not much faith in statistics. The ratio of deaths due to chloroform was about 1:3000, and it was about the same for ether. You can give either anesthetic with equal safety. As a rule, we give ether indiscriminately, but we select our cases when we use chloroform. The speaker said he had no hesitation in using one or other.

DR. F. B. SUTLIFF: I think the A. C. E. mixture is safer than chloroform as it is chloroform diluted. I like chloroform, but I do not use it because it is not safe.

DR. THOS. ROSS: There is no anesthetic that is absolutely safe. Nitrous ether is not adapted for certain operations. Chloroform is used on the continent of Europe and ether in the United States, and this was certainly due to the fact that American surgeons believed it was safer. Statistics were not altogether reliable. Chloroform in operations in children does not irritate the air passages and the child is more quickly anesthetized. Chloroform is also preferable in obstetrics. Lyman's article in Ashurst's Surgery, gives a very slight percentage of deaths from chloroform. Wyeth gives 1:3000 from chloroform and 1:20,000 from ether. Surgeons certainly prefer ether, as the mortality is smaller as compared with chloroform.

DR. C. B. NICHOLS: I have watched the ups and downs of ether and chloroform for 23 years. For years I gave chloroform, used it like water, and never had an accident. Any of the deaths reported would have occurred with any anesthetic. The fault may be with the administrator; too much may be given. I do not believe the statistics, as published, are correct. That the patients died from chloroform cannot be proven. Chloroform was not given in Boston because it was a part of the religion of the profession to use ether. During the past five years chloroform is being more used than heretofore. It is the best anesthetic we have, though in cases where it cannot be used ether may be substituted.

DR. M. GARDNER: In almost all the hospitals of Europe they give chloroform. The death rate there is so small as to cut no figure in the case. A very simple inhaler is employed, usually consisting of a clean towel. Inhalers seem to have been generally abandoned on account of their uncleanness.

DR. H. L. NICHOLS: I have used chloroform for 50 years, and it has my preference. I have also used ether, and successfully. I have never had an accident with chloroform, nor have I ever seen an unfavorable symptom. I usually give chloroform on a clean towel or handkerchief. I have had patients under the influence of chloroform for several hours. In Boston men are wedded to chloroform.

DR. J. H. PARKINSON: In looking at the subject in a general way any one will be struck with the fact that all the warm countries favor chloroform, while the colder ones prefer ether. This is probably due to the fact that it is much more difficult to give ether in a warm climate than in a colder one. This must have been repeatedly noticed by all present during the summer. Chloroform is much more convenient than ether in an emergency. It can also be administered with less danger in renal complications and in lung troubles. Regarding rapidity, chloroform can be administered in many ways, ether in one only, and with an inhaler. Given in this manner, and with little air, it is quite as rapid as chloroform. There need be no more struggling with ether if the patient's confidence be first obtained. With little children ether must be given by force, and quickly. With chloroform the element of danger is the chief objection. Patients die when only partially anesthetized sometimes when but a small quantity of the drug has been inhaled. I believe this would not occur with ether. Very few deaths occur during the early stages of ether administration, and while death does sometimes occur subsequent to the administration, it is certainly better for the patient to die in bed than on the operating table. The A. C. E. mixture is certainly safer than chloroform, because it contains less of that drug. Where serious symptoms occur during ether administration, I do not feel the same alarm as if these symptoms came on during chloroform anesthesia. I have never seen a case that could not be anesthetized by ether. Dur-

ng administration the ether should be measured, and only a small quantity given at a time. It is true that with ether we have more after-trouble.

DR. W. E. BRIGGS: I cannot agree with the views of the author, as I believe that ether should be used in the majority of cases. With an inhaler it can be administered as readily as chloroform, and I have never seen a fatal case. With chloroform I have seen three cases that for a time looked as if they would prove fatal. As a rule I have used ether, and I consider it safer. Enucleation and iridectomy are the only operations on the eye in which it is, ordinarily, necessary to use a general anesthetic, cocain being usually sufficient. I often employ chloroform in operating on children. In Germany chloroform is used almost exclusively, and there they deluge the patient with the anesthetic. In one operation on the mastoid that I witnessed in a Berlin hospital, the symptoms for a time were alarming.

DR. F. R. WAGGONER: In my early pupilage, and up to the time of the civil war, chloroform was in almost universal use. I have used it in a large obstetrical practice. In one patient respiration stopped, but was soon restored. Taking precaution to administer it with plenty of air, allowing the vapor to fall by its specific gravity on the nostrils, I have never experienced any trouble or danger. The hypodermic use of atropine and morphine materially assists in the administration of chloroform.

DR. H. D'ARCY POWER: That there are more deaths from chloroform than from ether does not determine my practice. It is easier to fill a patient with chloroform than with ether. When chloroform is administered properly there is not so much danger. Death is due to carelessness. Too much chloroform is given and the absorption goes on for some little time after. It is purely the result of crowding on the gas. An inhaler is useless. Use a small pad, depending on the gravitation of the vapor. I have twice seen cases where plenty of air and time were required, and the results were very satisfactory. The Hyderabad Commission observed that 1 in 1,330 died where observation was confined to the pulse; none in 45,000 when the respiration was watched.

DR. G. L. SIMMONS: The leading American surgeons believe in ether. Ether was discovered in 1846 and used two years before the discovery of chloroform by Simpson, without an accident. I have always given ether and never seen any bad effect. The only death so far in Sacramento from an anesthetic was from the administration of chloroform by two competent men. It gave such a shock to the community that it was impossible to get them to take chloroform, and in private practice we have since always used ether.

DR. A. T. PIERCY, of Benicia: I have been taught that ether is much safer than chloroform, and I have used it. Chloroform is much easier to give than ether. Chloroform is a sharp knife; ether the duller one. Chloroform is equally as safe in competent hands. I give it only a few drops at a time and place the handkerchief to my own nose to test its strength. I have never known of a death directly attributed to ether; have known several cases of deaths from the effects of chloroform. All patients die from chloroform at first and only take a few whiffs. They do not wait until after the operation.

THE PRESIDENT: I have used both until the last three years, but now confine myself to chloroform. Looking over the subject and the condition of the patients who die from chloroform, it is evident there is a pathological condition present, and they would have died even if no anesthetic were administered. A great many patients die suddenly, and if an anesthetic had been administered death would be credited to the anesthetic.

CALIFORNIA ACADEMY OF MEDICINE.

Regular Meeting, March 17, 1894.

The President, JOHN F. MORSE, M.D., in the chair.

Partial Paralysis of Left Oculomotorius and Facial Nerve in Early Syphilis.—DR. K. PISCHL presented a case of partial paralysis of the left oculomotorius and facial nerve in the early stage of syphilis. The patient, a bachelor, 62 years old, had, 30 years ago, venereal ulcers on the penis. Six months ago he contracted syphilitic infection. Since then he often awakes with headaches, complains about rheumatic pains in his back. March 12th, patient noticed that he sometimes saw double; two days afterward the speaker found paralysis of

the external muscles of the left eye (which are innervated by the oculomotorius) with crossed double images; two days later the signs of facial paralysis appeared, as could now be seen. [Patient exhibited.] *Status Præsens*: healthy looking man; respiration and circulation normal; urine normal; visible mucous membrane normal. In the sulcus coronarius penis is a hard scar. Glands in the groin and epitrochlear glands swollen, trunk covered with syphilitic roseola. (Dr. D. W. Montgomery, who was kind enough to examine the case, confirmed the above statement.) Right eye normal; left eye drooping, eyeball turned out, movements in other directions impaired. Exact examination of the double images shows the paralysis of the external muscles depended upon the oculomotorius. Pupil reacts well; fundus normal; accommodation not impaired. Mouth drawn to the right, naso-labial fold lowered; the left eye can still be closed and the eyebrows lifted. The case seemed interesting enough to present to the Academy, because we see here an affection of the nervous system in the early stage of syphilis contrary to the cast iron rules of Ricord who contended that the nervous system is only affected in the third stage of syphilis.

DR. E. KELLY read a paper on "Gangrene of the Scrotum." [Published at p. 393.]

DR. DUDLEY TAIT: I fully agree with Dr. Kelly as to the rarity of this form of gangrene to the general surgeon, but in the wards of Children's Hospitals it is comparatively frequent, especially after eruptive fevers. This I think is one of the best points to prove that its origin is due to a microörganism. In surgical practice it sometimes occurs as a complication with the old time routine treatment of hydrocele by injection. One case I can bring to mind where the injection of a mild solution of iodine caused a slough. The repair I do not consider as wonderful; there is an abundance of scrotum, too much possibly, and half of it could be resected and no trouble result as to the cicatrix. The cause here in Dr. Kelly's case might have been a phagadenic chancre. I have seen one case where a foul chancre on the lower border of the penis caused extensive sloughing. As to the question of the necessity of castration, Dr. Kelly was right; there is absolutely no necessity for such a proceeding and it would be unsurgical to perform it. I do not know of any instances where it has been done.

DR. V. GODFREY, United States Marine Hospital Service: I have seen a few cases only. This scrotum certainly looks as it did before the sloughing occurred. This brings me to ask whether or not the peculiar behavior of the destruction of the scrotal tissue does not suggest a special microörganism. After various exciting causes we see the whole scrotal tissue begins to slough, and before we know it is gone, then nature quickly supplies a new one. The sloughing is very rapid and often sets in from apparently no cause. I remember a case where the patient's trouble seemed to be simply malarial; he had a few chills and then the scrotum began to slough. After a herniotomy I have seen sloughing. In that case I would have laid the blame upon the operator and a microbic infection. The question is whether or no a specific microbe may be the *fons et origo*.

DR. G. C. McDONALD: I would like to ask Dr. Kelly what was the calibre of the stricture? A probable and most likely cause might be a slight stricture with an ulcer behind it, a rupture taking place, urine passing through, and scrotal gangrene resulting. This stricture might be overlooked, as a No. 8 or 9 catheter could be passed without detecting it. It is not odd that it sloughs so peculiarly; it is a soft tissue and there is no line of demarcation to cut it off. As to castration, I never heard of such a thing under these circumstances, and I think it would be worse than murder.

DR. I. RIVAS: Three years ago I had a very peculiar case. There was an enormous slough of the scrotum, and from this came out a large stone. There was then rapid and perfect healing, save for a urethral fistula.

THE PRESIDENT: In these days of skin transplanting and grafting, and the gratifying results therefrom, there need be no fear of a bad result. As to the question of castration, it should not be considered for a moment.

DR. KELLY: I would never have thought of mentioning the subject of castration had I not seen statements made concerning it in Bumstead; also in Allen. I cannot see why it was necessary under any such circumstances. In answer to Dr. McDonald, I will state that there was no evidence whatever of urinary infiltration. I had not passed the sound and could not say there was no stricture,

but the patient denied all venereal disease. I could not find any evidence of it as the scrotal sac was dead when I first saw the patient. I had to take the patient's word for it. There had been no application made sufficiently strong to cause it. The patient had used a liniment, and as the trouble had set up immediately after that he thought it had been the cause; but on examining it I found it was a very mild ammonia liniment and in all probability had nothing to do with it.

Registration and Segregation in Tuberculosis.—THE PRESIDENT announced as next in order the discussion on the action of certain State Boards of Health in recommending the registration and segregation of tubercular patients, with a view to limiting and preventing the spread of the disease.

DR. W. WATT KERR, in opening the discussion, said: I do not in this discussion refer to the communication of phthisis by meat, milk, heredity, etc., but simply to its communicability from man to man. The majority of the profession are pretty unanimous in the opinion that the disease is communicable. The subject naturally resolves itself into two divisions—communicability and method of prevention. Most men believe the bacillus of Koch to be the cause of tuberculosis; and when we recall the results of experiments and inoculations we are forced to admit the relation between the two. The bacilli of tuberculosis in sputum which has been dried and inhaled into the lungs of a person free from lung trouble, may produce the disease if there is a favorable condition for their lodgment. We, therefore, cannot but recognize the fact of its communicability, and such a fact leads to the discussion of the best method of prevention. Many have proposed a segregation or registration of all tuberculous patients, and hope in this way to control the disease. Such a method would mean a practical ostracism, and is entirely uncalled for. We must look to the prevention, to the life history of the bacilli. It is claimed that we find them in all secretions of tubercular patients, mostly, however, in the sputum. This, then, would lead us to the best methods of rendering the sputum harmless. When first expectorated the tubercle bacilli are enclosed in an albuminous envelope and cannot contaminate the air, such contamination taking place only after the sputum has become dried, is pulverized and mixes with the air. Heat and sunlight are the most efficient destroyers of the bacilli. It is not to be supposed that every one who inhales the bacilli will become infected; it is only when there is a diminished vitality of an organ, or the system in general, from, say a prolonged fever, pneumonia, bronchitis, etc., or overwork or hereditary transmission, that there is danger of infection. To prevent all this shall we segregate these people from all association with the world, or shall we give more attention to the improvement of the general hygienic conditions of all tubercular patients, enabling them by securing an increased vitality to withstand the disease? Suppose that we had a law to segregate all tubercular patients; the expense of carrying it out would be immense. If we isolate a man the State must support him, and so many people have phthisis the drain would be very large. Such a law to have any effect must apply to every one whose sputum contains tubercle bacilli, or has a tubercular deposit in any tissue of the body. Many have the disease and do not know it until it is called to their attention through some other trouble. Every day would bring us new cases. They would come by rail and steamship, and an absolute quarantine would be impossible; the maintaining of such a quarantine would involve an immense outlay, even for medical inspectors. Again, it is not right for us to attempt to practically quarantine tubercular patients, as we would in small-pox or scarlet fever. A person suffering from these is unfit for public duty, but he will be all over it in a few weeks, and as well as ever, while a tubercular patient may live for years, often a greater part of his lifetime providing for himself and others. There is no use in members of the medical profession endeavoring to secure the passage of such a law; if they cannot suggest a better means, it is best that they say nothing. Certainly the profession should give some advice, which if not effective would be at least practical. If the law could prevent and control the disgusting habit of spitting everywhere it would do more good. Make, for instance, the spitting on a car floor a police law instead of a car company's law, and we would check one factor in the spread. Hotels are just as bad. Suppose we had a phthisical case in a room in a hotel, in bed with a lot of newspapers lying about in which to expectorate, as frequently these patients will not use cuspidors. After staying

here for a month or so another person, who is run down and generally weakened, occupies the room. Now, as the sputum oftentimes having reached the floor becomes dry and readily inhaled, this newcomer may contract the disease. In such public places and workshops there should be a law compelling all persons to expectorate in a cuspidor containing some germicide, or into a receptacle that could be easily destroyed by heat. We should also teach our private patients to use the cuspidor for the protection of others. The cuspidor's contents to be subjected to prolonged exposure to a powerful disinfectant. The popular idea is that the minute a disinfectant comes in contact with a substance it is disinfected; it is not so, it takes time. In private families we can segregate to a certain extent by warning the rest of the family to occupy separate sleeping rooms, and not allowing any one to occupy a room lately inhabited by a consumptive until it has been thoroughly cleaned, and seeing that the person to occupy it is perfectly healthy. One thing I want to speak of is that in public hospitals phthisical patients have the run of the other wards, or they may occupy the beds next to patients suffering from pneumonia, or some prolonged sickness, which latter circumstance renders the individual a fit subject for tuberculosis. Of course there are cuspidors and disinfectants, but in such places one has to keep constantly after the patients to enforce the rules. Regarding prisons, there should be laws enacted to secure light airy cells; a long confinement tends to debilitate, and the inhalation of bacilli-laden air proves fatal. Heights of buildings should be regulated nowadays; the tendency is to tall buildings and very narrow streets. These tall buildings tend to prevent a proper dilution of the poison-laden air below on the streets by excluding fresh air and sunshine, which are powerful factors in health. We should establish plenty of plazas; they are the city's breathing places, and not allow them to become built upon. Impress upon the people that phthisis is very common; that it is infectious; that it is not certainly fatal, and that a proper attention to health will render them immune.

DR. G. C. McDONALD: Years ago the tubercle bacillus was discovered and ever since the profession has been "supposing." I myself do not believe that the inhalation of the bacteria in all cases will cause phthisis. In some cases of phthisis we do not find the bacillus. In those trades where people are exposed to irritating dusts, for instance, they have all the symptoms of the disease and die. I do not say that in all cases the bacillus is not the cause, but I do contend that it is the exception to the rule, and only under certain conditions can the bacillus gain a foothold and set up mischief by a breaking down of the tissue. Regarding segregation, it is not possible to carry this out. First, as Dr. Kerr has just said, the expense would be too great; and then before the medical profession promulgates such ideas it should be very sure of its position, and not make itself the laughing stock of the whole community. In supporting his theory of the contagiousness of phthisis, the speaker quoted at length from a paper on "The Relation of Dusts to Tuberculous Infection," by Dr. G. G. Keron and Dr. F. H. Arnold, which appeared in the *Lancet* of January 6, 1894. The investigations were to discover if the placing of tuberculous patients under certain restrictions would diminish tuberculosis, etc. Guinea pigs were inoculated with dust obtained from various places exposed to infection, and in one case with old dried tuberculous expectoration. In the whole series of 100 animals inoculated only two deaths were due to tuberculosis. One had been inoculated with dust from the main outcast air-shaft of a hospital, into which, in 40 years, 20,000 consumptives had been admitted, and died in 14 days. The other, which was inoculated from the same source, was killed three months after inoculation. Both had grey miliary tubercle in the liver. In another case a nodule developed at the seat of inoculation, but this had no macroscopical appearance of tubercle, nor on microscopical examination could any tubercle bacilli be found. This shaft had not been swept in forty years. So much for experimental research. It is well known that those who attend and nurse tubercular patients do not suffer from that disease beyond the general average. Statistics of Drs. Andrew and Theodore Williams, of the Brompton Hospital for Consumption, show that no special liability could be found among the medical and nursing staff of that institution. Dust is no doubt a factor in the cause of phthisis pulmonalis, but it need not be infected with tubercle bacilli to cause consolidation and breaking down, and all the phenomena of phthisis, as for instance in the trade of the miner, stone, knife and scissor grinder, stonemason,

wool and feather sorters, etc., in which dust there is little likelihood of tubercular infection. Let us note that by far the greater amount of tuberculous sputum finds its way on handkerchiefs, diapers, cloths, rags, carpets, etc.; thus preserved it soon becomes dry. We would thus naturally, on theoretical ground, look for an increasing mortality in those who handle, shake and pick over these rags. Furthermore, the papermakers would be very liable to become infected, the rags consisting of old handkerchiefs, diapers, sheets, underlinen, towels and every variety of wearing apparel, some clean and others alarmingly dirty. In the process of shaking, tearing and sorting these, dust is caused so as to completely surround the heads of the pickers, these being young adults, mostly women, and good soil for the bacilli. Dr. Beal, physician to the City of London Hospital for Diseases of the Chest, had the following questions sent to all the medical officers and boards of management of the paper mills throughout England and Scotland: (1) Does tuberculous disease of the lungs or other organs frequently occur in young adults employed in your paper mills? (2) Is there any reason to believe that the dust from the rags is a source of that disease? (3) Are the rags cleansed, wetted or disinfected prior to sorting? (4) Have any cases of inoculation of the skin been observed, presumably due to handling the rags, as tuberculosis or lupus? To all of these inquiries he obtained negative answers. Dr. J. E. Fowler, of Auch Mill, in answer to question four, said that in some instances cases of poisoned fingers occurred, and there had been one case of lupus attacking the lip; Dr. Wilkinson, of King Norton, and physician to Baldwin's immense paper mill, which uses all classes of rags and manufactures all kinds of paper, gave a negative answer to all four questions, and added that during an active practice of 24 years in these mills he had not known of one case of tuberculosis. From Bury in Lancashire, at Wrigley & Sons' paper factory, Dr. W. H. Barr states that during the 20 years that he has been attached to the dispensary and infirmary, together with his observations as medical officer of health for a like period, he has perceived no connection whatsoever between the disease named and the workers in this or any other mill. Moreover, as certifying surgeon under the factory Act, he has failed to notice any connection between tuberculosis and rag pickers in paper mills. He adds that with the daily opportunity he has had and has for observing, such a connection could not have escaped his notice.

DR. I. RIVAS said: None of the gentlemen have spoken of an important point. I refer to marriage between phthisical patients. What influence would this have on the question?

DR. DUDLEY TAIT: We must admit that tuberculosis is contagious after prolonged exposure and agree that some legal measures should be taken, but any law on this subject would be very difficult to enforce. In yellow fever, for instance, we can quarantine and the patient will not object, but a tuberculous patient would, especially if only in the primary stages. In France since Koch's discovery there have been many devices to prevent the spread. Many hospitals have separate wards. In the French hospital here it was tried, but with miserable success. There are many objections; one is the dislike some patients have to enter such wards or hospitals. In Germany there is a special hospital for consumptives and it is said to diminish mortality in Berlin; but by looking into its real cause it will be found that it results from the exodus of consumptives from Berlin. I believe there should be a better diffusion among the laity of the knowledge of the prophylaxis and general hygienic management of patients. Even if there was a rigid law it would do no good. Take, for instance, the laws governing inspection for syphilis in some countries and you will find that the disease is more prevalent and intense than where no such laws exist. Regarding disinfection, it has been proven that disinfecting liquids in cuspidors are absolutely worthless; excelsior in the cuspidors, which can afterwards be burned, is the best thing. Regarding the remarks by Dr. McDonald, I consider them out of date. Dust will produce death in 50 per cent. of cases anyway.

DR. McDONALD: The notes from which I read are not my own; they simply cover the ground up to February of this year.

THE PRESIDENT: The idea of bringing up this subject was to see how the Academy stood on the idiotic action of some Boards of Health regarding prevention by segregation, etc., and was not meant to touch on the contagiousness

or hereditary factor of tuberculosis, simply to stamp with our disapproval any such foolish legislation.

Regular Meeting, April 21, 1894.

Suppurative Disease of Knee-joint with Extensive Necrosis of Tibia and Femur.—DR. D. D. CROWLEY, of Oakland, reported the following case and exhibited the specimens. The history gleaned from the patient was as follows: The patient, a woman, middle-aged, came under my care about four months ago, suffering from a suppurating knee joint. Ten years ago, while alighting from a buggy, she fell, and, as she expressed it, she sprained the tendons and muscles at the back of the leg and knee. The knee became swollen and tender; in fact, remained tender for several years, but during this time she could walk very well. Six years after the first accident, she slipped while walking, and fell again. The knee became swollen, and she remained two weeks in bed, after which, and for the next two years she had to walk with the aid of a cane, or sometimes two, as the knee gave considerable trouble from time to time. Two years ago she fell again, and was treated by her physician for a fracture just above the knee. Since the last accident she has been unable to walk without the aid of a cane or crutch. One year ago she said it "pointed" near the inner side of the knee (internal condyle). A physician was called in, who opened it, quite a quantity of pus escaping. Such was the history up to four months ago, when she came under my care. I enlarged the sinus, which was pin hole in size, and irrigated the joint frequently with solutions of boric acid. Reasoning that it might be tubercular, I gave a couple of injections of iodoform glycerin, 10 per cent. into the joint. Two weeks apart, these were followed by a temperature of 103° F. As the patient's general health was poor, and she was greatly emaciated, I resolved, a month ago, to build her up, preparatory to operating by opening the joint and resecting. April 15th, I proceeded to make a semi-lunar incision, convexity downward; exposed the patella and severed it, and in this manner it was easy to reach the joint. I was greatly astonished to find the tibia extensively necrosed and a large cavity extending down into it 2 or 3 inches below the articular surface. A part of the tibia was broken away to ascertain how far the necrosis extended. During this examination a cavity joining the medullary cavity of the femur was found. The question arose as to which would be the proper course; if I removed both sections of bone there would probably be a shortening of seven inches or so, suppuration might ensue and a further operation be necessary; and, at best, the limb would be practically useless. The limb I considered was of no use as it was, and, therefore, I amputated the thigh at about the middle third. I would like to inquire whether it would have been better to remove that portion of bone and wire the femur to the tibia, or do as I did—amputate?

DR. J. M. WILLIAMSON: Taking the history into consideration, and the liability of a prolonged suppuration, the chances of recovery would be below par, and I believe Dr. Crowley pursued the proper course.

DR. LUKE ROBINSON: I think that Dr. Crowley did the best thing that could be done under the circumstances; if he had not done so, he would, in all probability, have had to do a subsequent amputation.

THE PRESIDENT: Resection of the knee is not favorable unless the trouble is localized to the joint.

DR. T. C. RETHERS: I have a very similar case at the present time, and would like to amputate as the best thing to do, but the patient will not submit to it.

Painful and Sympathetic Stump.—DR. CROWLEY: I amputated a leg about two months ago, 3 or 4 inches above the knee, for gangrene, resulting from a fall, that had extended to the knee. The peculiar feature now is that this stump acts as a sort of register for the acts of micturition and evacuation. If the acts are not performed when the desire first comes on, the stump becomes very painful, and during coition, at the moment of ejaculation, the stump becomes very painful, so much so that it renders the act rather agonizing than otherwise. I have never heard of a similar case.

Cholecystectomy.—THE PRESIDENT reported a case of cholecystectomy and exhibited the specimens. Patient, male aged 27 years, native of Bavaria, by occupation a saddler, entered the German Hospital, October 18, 1893. The fol-

lowing is the history: Parents both dead; mother died at the age of 45 years, when patient was quite young; said to have been sickly. Father died at the age of 66 years. Patient, when a boy, was often ailing, so that he had to be kept out of school frequently, suffering from jaundice, for which he had been treated at a hospital when he was 13 years of age. After riding in a race, at the age of 19, he complained of intense pain in the right hypogastrium, which again necessitated treatment at some hospital. At the age of 20 he had another attack of jaundice, with such severe pain that his life was despaired of. His so-called "liver trouble" was sufficient to excuse him from military duty. Since that time he has, at intervals of 6 months to 2 years, been troubled with paroxysmal, intense pains in the right side, always accompanied by jaundice. The paroxysms returned so frequently that the patient had to give up his business of breaking horses and riding. He had never been treated for gall stones, and had never passed any. Quite recently, after taking a quantity of oil, he passed some things which he thought were stones. The attacks of colic grew more frequent, the pains so intense that the patient would writhe in agony upon the floor, and made several attempts to commit suicide by battering his head against the wall. While in this condition the patient was brought to the hospital. He was suffering intense pain in the right side, and was very yellow. He was very weak, and had, upon entering, a temperature of 100.4° F., which dropped to normal on the following morning. On the 20th several small yellow concretions were found in the passages. The pain continued, and on the 23d a hard lump could be distinctly felt rolling under the finger in the region of the gall bladder. Patient was advised to undergo an operation, to which he gladly assented, and, on October 24, 1893, cholecystectomy was performed. The temperature rose to 101.6° on October 30, dropped the following morning, and did not again rise above 101° until November 30, when it fell again to normal. December 17 the temperature rose to 102.6° ; patient got very yellow, and felt very badly. An abscess formed, and on the following day a ligature came away and the patient improved. The fistula closed on February 5th, remained closed for three weeks, reopened slightly on March 18th, but closed again the day after. Since then there has been no colic, and only some little stomach trouble.

Large Cysto-fibro-sarcoma of Breast.—DR. T. C. RETHERS exhibited a breast that had been removed that morning from a woman 55 years old. The tumor had been noticed for about 12 years when it suddenly began to grow. The tumor was quite large, weighing five pounds. There was no difficulty in removing it by a large circular incision. A few large arteries were ligated. There was an abundance of skin to close the wound. The tumor was a cysto-fibro-sarcoma.

DR. LUKE ROBINSON read a paper on "William Harvey" [published at p. 416], and presented the Academy with a handsome etching of the distinguished anatomist.

THE PRESIDENT: As President of the Academy I take great pleasure in accepting this valuable etching and in thanking Dr. Robinson for his ever kind thoughtfulness. I hope that it will always be a remembrance of him.

DR. J. M. WILLIAMSON moved that the etching be accepted and that a vote of thanks be tendered Dr. Robinson for his gift. This was carried.

DR. ROBINSON: Harvey was buried in 1657 at Hampstead. In 1882 or '83 the College of Surgeons got permission to remove his remains, and I was present when the body was taken up. It was found wrapped in lead, one corner of which had been oxidized. It was then buried in the College vault. The old boards with arteries cemented on them with which Harvey used to teach the circulation, are now in possession of the College, along with a few books of his library that escaped the great fire of 1666.

SAN FRANCISCO MEDICO-CHIRURGICAL SOCIETY.

Regular meeting, April 30, 1894.

The President, ALBERT ABRAMS, M.D., in the Chair.

Amebic Dysentery.—DR. J. O. HIRSCHFELDER presented a case of amebic dysentery, occurring in the person of a Japanese, a patient in the City and County Hospital. In January last he began to suffer with abdominal pains

accompanied by diarrhea. There were from 6 to 20 evacuations of slimy feces every 24 hours, with tenesmus, each stool being more or less tinged with blood. Physical examination, March 22d, showed the patient to be pale, face slightly puffed, tongue coated white, thoracic organs normal, with the exception of an accentuated second, aortic sound; abdomen tense and sensitive; liver 9½ cm. in mammary line; spleen not demonstrably enlarged. Opium, gr. i every 3 hours, with milk diet, diminished the number of stools somewhat. The stools were examined and found to contain large numbers of amebæ. Injections were then made of sodium bicarbonate, 1 ounce to 2 quarts of water, in the knee-elbow position, using a long terminal. This was followed in half an hour with quinine hydrochlorate, 1:2000, with the result of a considerably diminished number of evacuations in 24 hours, and of the number of amebæ. The tenesmus entirely disappeared. The patient's temperature has not been observed to be above normal. Examination of the blood showed the hemoglobin to be diminished to about 50 per cent. of the normal; urine, sp. gr. 1010, acid, and does not contain albumin. The speaker described the organism and the lesions caused by it in the intestine, reviewing the history of the study of the ameba coli, and referring particularly to the work of Councilman and Lafleur, of the John Hopkins Hospital, on this subject. He demonstrated to the Society the living amebæ on the warmed stage.

DR. L. C. LANE said that in 1855 he had under observation a large number of patients with dysentery, contracted while working on the Panama railroad. He made autopsies on many of them. Numbers of the cases were complicated by liver abscesses. He remembered very well the ulcers in the colon, which closely corresponded to the description given by Dr. Hirschfelder.

DR. J. H. WYTHE said he had under observation at present a case of dysentery in a person who had just come from China. He described the leading characteristics of the principal divisions of the protozoa, and referred to a number of pathogenic and parastitic species. The protozoa which are found to be parastitic in vertebrates are nearly always coccidia or sporozoa. Others are found parasitic in invertebrates. These are nearly all amebic in the earlier stages of their development. In the early days of the microscope, Loevenheuck found amebæ in the kidney of the frog, and Ray Lancaster found them in the frog's blood.

AMERICAN MEDICAL ASSOCIATION.

General Sessions.

FIRST DAY—TUESDAY, JUNE 5.

The forty-fifth annual meeting of the American Medical Association convened in the large Assembly Hall, Odd Fellows' building, San Francisco, Tuesday, June 5th, at 10:45 A. M. The meeting was called to order by the President, JAMES F. HIBBERD, of Indiana, and was opened by prayer, offered by the REV. DR. MACKENZIE, of San Francisco. Through an unfortunate coincidence, GOVERNOR MARKHAM and the LIEUTENANT-GOVERNOR, J. D. REDDICK, were both unable to be present. MAYOR ELLERT, of San Francisco, was also among the absentees, but his place was ably filled by SUPERVISOR J. G. JAMES, who heartily welcomed the Association to San Francisco.

Address of Welcome.—DR. G. L. SIMMONS, of Sacramento, President of the Medical Society of the State of California, next delivered an address of welcome on behalf of the profession of the State. The speaker first reviewed the history of the profession in this State, especially in connection with medical organization. His long residence in California, since 1850, and his early affiliation with medical societies, dating from 1857, fully entitled him to speak on this subject. He reviewed the progress of the profession, and of medicine in California, paying a fitting tribute to those names that had made its early history famous. He referred especially to Logan, Thomas, and the elder Gibbons, as well as to Cooper, the pioneer in medical education. The work of some of these early pioneers had been earnest and painstaking. It had now, in some cases, become invaluable because it was irreplaceable. This was especially true of Logan, whose meteorological observations, extending over many years, were now the basis of the statistics of the Weather Bureau in California.

He alluded to the growth of the Association; to its influence for good, and to the work that it had accomplished in elevating the standard of medical education, predicting for it a field of continued usefulness. In conclusion, while welcoming the Association to California, he said that in every town or village in the State the button of the Association would be an ample introduction wherever its wearer went.

Committee of Arrangements.—DR. R. H. PLUMMER, Chairman of the Committee of Arrangements, presented a report of various matters in connection with the meeting. He stated that there were still some belated travelers from whom he had received telegrams expressing their regrets at being unable to be present, and the hope that they would arrive before the close of the meeting. He gave a brief review of the work of his committee, of the organization of the meeting, and of the entertainments, at the same time presenting invitations from various sources extending hospitalities to the visitors. He then, on behalf of the committee, presented President Hibberd with a handsome gavel; this was made of manzanita root, the handle being of heart of orange wood. Attached to the gavel, on each side of the head, was a gold plate with the President's name on one side and appropriate lettering on the reverse. On behalf of the physicians of Southern Oregon, he then presented a number of gavels made of laurel, one for the Chairman of each Section, which were received for them by the President.

Annual Address.—THE PRESIDENT then delivered his annual address. He first alluded to the change in the date of the meeting from May to June, in order to permit the various State societies to express themselves on the question of revision of the Code of Ethics. The speaker next dealt with the subject of medical organization, in relation to which the constitution of the Association was at present in need of amendment. The constitution called for delegates from subordinate societies, when such societies were represented by delegates in their respective State societies. In many of the States this provision was not enforced, and difficulties consequently arose at the different annual meetings. He suggested that the system in force in Indiana was best fitted to meet the case. Here each county society was represented in the State Society by delegates who alone had the right to vote, and at their annual meeting each society also elected delegates to the American Medical Association, who were then commissioned by the State Society. By following this plan a complete organization of the profession could be effected throughout the United States. The constitution of the Business Committee, as now made up, was considered, in connection with the proposal to confer upon it the functions of the Nominating Committee. It had been urged that this would virtually hand the control of the Association over to the specialists, as the officers of sections were of necessity specialists. The speaker did not take this view of the matter. He regarded the sections as representing the aggregate of all the members present at any annual meeting, and that, therefore, their choice could be of the most representative character. The functions of the sections in relation to officers was only to nominate, and the election or confirmation rested with the whole body of the Association, who could reject if they saw fit. He believed that the Nominating Committee demanded a greater permanence than its organization at present presented.

When Dr. Geo. M. Sternberg was appointed Surgeon-General of the Army one of his first innovations was the formation of an army medical school at Washington, for the purpose of giving passed candidates to the service special instruction in bacteriology, sanitary chemistry, and other branches essential to military service. He also arranged that the position of attending surgeon in cities having special facilities for medical instruction should be filled by young men preparing for promotion. The number of these young men about the larger cities had attracted the attention of the Chairman of the Committee on Military Affairs, who had accordingly provided for the reduction in their number from 125 to 90. When remonstrated with the chairman had stated that no protest had been received from any medical society, but only from the assistant surgeons directly interested. The speaker urged that the Association at once express its opinion on this subject, as, if carried out, this would leave the medical care of the troops at many posts in the hands of the civil practitioners, who, in case of active service, would not take the field, and would thus leave the army deficient in officers who were as necessary to it as any others.

A proposed reduction in the appropriation for the library of the Surgeon-General was mentioned. During the last Congress an attempt had been made to reduce the appropriation needed to complete the catalogue, on the ground that the medical profession was asking too much. This had been saved and the work continued, but a reduction had been made in another appropriation from \$10,000 to \$7,000, the difference being needed to enable the purchase of books now out of print, and only procurable at private sales. It was a mistake to imagine that the library was maintained for the benefit of the department, or even for the medical profession alone. It was used as a reference library for physicians all over the country, and in this way directly benefited the public. The speaker commended this also to the attention of the Association for immediate action. He then discussed at some length the efforts of the Association towards the establishment of a Bureau of Public Health. As the result of an extended inquiry and a great deal of correspondence he expressed the settled conviction that there was no hope whatever of the establishment of a Department of Public Health within the present century. A Bureau of Public Health with a Commissioner within one of the existing departments might have been within the possibilities, until the powers of the Marine Hospital Service had been so increased, but this had for the present at least put an end to any extension in this direction. In his opinion there was no bill that had been proposed which he regarded as so deserving of support as the bill of the New York Academy of Medicine; and in making this statement he was aware that opposition to this bill had been expressed in quarters worthy of the greatest respect. The speaker referred to the existence of outbreaks of small-pox during the past two years as demanding the unanimous and repeated expression of the profession in favor of the protective power of vaccination. He hoped that the Jenner centennial celebration, provided by the Association as a part of its exercises in 1896, would bring out more clearly than ever the great advantages of this discovery. The necessity of the study of biology was one of the needs of the day. It was through the results achieved by this science that the greatest progress had been made in our science and art. Under its influence medicine had risen more nearly to the level of an exact science, and the whole profession had proportionately advanced in the eyes of the public. One of the purposes of the founders of this Association had been the elevation of the standard of medical education, and he believed that this would be greatly aided by the founding of a Chair of Biology in every school. In conclusion, the speaker referred to the proposed changes in the Constitution and Code of Ethics of the Association. He said that it was quite evident that the present Code and Constitution was not in harmony with the opinions of a large number of the Association who felt that some changes were needed, the better to adapt it to the demands of modern conditions. On the other hand, there were many members as worthy and as eminent who believed that existing conditions were all sufficient for the needs of the Association. This applied more particularly to the Code about which there was even a stronger feeling of opposition to change. He then outlined a method by a preliminary vote whereby the whole matter might be shortly determined, and expressed the hope that in either event the settlement of the question would be accomplished without passion. The speaker had decided convictions on these questions, but he believed that his position was at present a judicial one, and he therefore refrained from expressing any opinion.

On motion of W. F. BISHOP, of Pennsylvania, a committee of five was appointed to consider and to report upon the suggestions contained in the address. On motion of I. N. QUIMBY, of New Jersey, a committee of five was appointed to prepare resolutions in reference to the proposed reduction in the number of assistant surgeons. The report of the Treasurer, R. J. DUNGLISON, of Pennsylvania, was, in his absence, read by the Permanent Secretary. The Treasurer said that this report represented his seventeenth year of service with the Association, and he regretted that illness in his family prevented him from being present at the meeting. Having alluded to the fact that this absence would create a vacancy, he said that for some time he had been desirous of relinquishing his position, and would now formally tender his resignation. His experience of many years prompted him to make some suggestions for the better conduct of business. He advised the abolition of the rule permitting delinquents to retain membership for two years, which, since the publication of the *Journal*, had often given rise to complications. He believed that this could

be now reduced to one year, so that members in arrears could be dropped, and simultaneously cease to receive the *Journal*. The list of members should be published every year, as soon as possible after each annual meeting. His experience had been that any increase of membership that may occur through additions made at the annual meetings, even in the most successful years, were almost always extinguished before the close of the fiscal year. Had it not been for the system of membership by application, adopted several years ago, there would be little or no permanent annual increase in the membership of the Association. He therefore hoped that this feature would be carefully fostered. In conclusion, he said that the work of the Treasurer was yearly becoming more onerous, and he believed that he should receive a salary commensurate with his important duties. On motion, the report was received and placed on file, and that portion referring to needed legislation was referred to the Business Committee.

W. B. ATKINSON, of Pennsylvania, as Permanent Secretary, read his report of the action of the State Medical Societies regarding a change in the Code of Ethics. Twenty-one societies were opposed to any change; two were in favor of a change; two laid the subject on the table; and of the remainder, some took no action on the matter, and the others had not, so far, made any report. C. A. L. REED, of the Committee on Pan-American Medical Congress, requested further time to present his report, which was granted.

THE CHAIR then announced a recess of twenty minutes, for the delegates from the different States to select their representatives on the Nominating Committee. The Secretary, on reconvening, read a list of names, to which there were subsequently several additions. The greatest number of votes cast at any meeting of the Nominating Committee was 39; the whole number of states and territories represented being 39. The Business Committee being incomplete, the officers of the various sections were instructed to appoint alternates from the members in attendance. The Association having voted Dr. Dunglison its hearty and unreserved thanks for his efficient and laborious duties as Treasurer, then adjourned.

SECOND DAY—WEDNESDAY, JUNE 6TH.

The Association was called to order by the President at 12 M. After the usual report by the Chairman of the Committee of Arrangements, in which additional invitations were presented, I. N. QUIMBY, of New Jersey, on behalf of the Committee on the Proposed Reduction in the number of Assistant Surgeons, presented the following resolutions, which the Permanent Secretary was directed to communicate to Congress by telegraph:

Resolved, That the American Medical Association urge upon Congress the advisability of preserving and promoting the efficiency of the Army Medical Department.

Resolved, That any reduction in the present membership of the Army Medical Department would be prejudicial to the interests of the army and the country.

Address on Medicine.—The address on Medicine was read by C. H. HUGHES, of St. Louis, who had taken as his subject, "The Nervous System in Disease and the Practice of Medicine from a Neurotic Standpoint." The speaker briefly mentioned the advances of medicine through preventive inoculation, beginning with vaccinia, and predicted that within a comparatively short time consumption, with a mortality of 165,000 in this country alone, would have become a thing of the past through judicious antisepsis. Modern surgery had also made wonderful strides, both in the management of affections of the abdominal cavity and in the treatment of brain lesions. He proposed in this address to direct the attention of the Association to some points in the practice of medicine from the standpoint of a neurologist. He first dealt with *la grippe*, which he characterized as a toxic neurosis, explaining its varied effects by the impression created on the nervous system. Some of the complications and sequelæ were identical with those produced in animals by section of the vagus and he saw in this an explanation of effects not otherwise possible. The disease was now generally recognized as a very grave one. It generally so weakens the nervous system as to permit all the tendencies to disease or the latent symptoms of former trouble to declare themselves. The disease was too often

made light of, whereas it was, in its immediate and remote effects, one of the gravest of maladies. The author also classed dyspepsia as a brain disease. It occurred, as a rule, not amongst the hard workers, but rather amongst the brain-workers and he who worries, eating but little and exhausting his nervous system. The brain influences the stomach and the stomach the brain, but the power of the former over the latter was far greater. In this conclusion it was not necessary to ignore any fact in chemico-biological research. The investigations of Beaumont on the stomach of Alexis St. Martin had conclusively proved the power of mental influences on the digestive processes. No better illustration of the potential relation of the nervous system to disease could be mentioned than hysteria. This condition, illustrated in a most forcible manner from the standpoint of clinical observation, how suddenly and how extensively all the organs in the body may be profoundly disordered by a morbid impression through the nervous system. The tropho and vaso-motor neuroses were legion and of the most opposite character. Referring to the fact that the nervous system regulates the law of rythm in the animal economy, he said that a clearer knowledge of this fact would often give hints and therapeutic suggestions for the management of our patients that were overlooked in practice. The importance of the early recognition of neurasthenia was dwelt on. The speaker regarded this condition which he had termed "neurathropia" as a disturbance of the brain, characterized by timidity of conduct, nervous irritability and morbid fears, bordering on, but not becoming delusions, and physically by functional atony of the viscera, especially of stomach, heart, bowels, and motor and psychical areas of the brain. The speaker next touched upon the relations of neural overstrain to the development of cancer and consumption. He believed, as he had stated many years ago, that a break down in the nervous system by which its trophic and resisting power is lessened, makes possible and precedes all cases of cancer. This was equally true of consumption, as it provided the necessary soil in which the bacillus could thrive. There had been a great advance in the recognition accorded to the influence of the nervous system on dermatological troubles, and results might be looked for as this truth became more evident. What was true of the stomach and lungs was also true of the heart, and it was evident that certain diseases of that organ came from states of the brain. That the neuropathic source of hemophilia was in the vaso-motor system is more probable than any asserted dycrasia of the blood. Cholera is so largely a condition of nervous prostration in its symptomatic expression, that we are more apt to save our patients by sustaining the nervous system than by the adoption of any other plan. He did not mean that this excluded any other treatment, but it was the damage to the nerve centers that we wished to guard against until the collapse stage had passed. The normal temperature of the body is regulated by the nervous system, and in like manner any derangement of temperature depends upon the action of some irritation, chemical, mechanical, or toxic, upon the nervous system. The influence of the nervous system upon the liver and the secretion of bile was well established. Leukemia was another of the conditions that resulted from profound nervous exhaustion or shock. Rattlesnake poisoning was an example of a profound impression on the nervous system, often killing very rapidly and without perceptible structural lesion. The nervous system is the supreme ruler of the organism and whatever view we may take of bacilli, bacteria, or cocci, disease becomes manifest only after the mechanisms of neural sensations, emotion, ideation, or control reveal it. A change in the weather or a certain exposure sends one man to bed with rheumatism, another with pneumonia, and a third comes down with remittent fever or phthisis. We say uric acid in the first case, pneumococci in the second, malaria in the third, and tubercle bacilli in the fourth. What is that vitality that permits one man to withstand climatic changes and to resist an infected atmosphere? We have invented, for evasive answers, certain elucidating terms as idiocyncrasy, diathesis, organic tendencies, but the true reply lies in the diminished control of the nervous system. The speaker closed a very eloquent if rather lengthy address, with a review of the progress of medicine in its relation to man, his well being, his commercial, and his social progress. He predicted that in the future medicine and the physician would take a rank far higher than that of any other profession. "Should men contest the claim of medicine to being the greatest of the world's benefactions, we reply: The germ theory of disease causation alone, with its

applied antagonisms, hygiene, antisepsis, perfect cleanliness, and resistive and tolerant inoculations has done, is doing, and is yet destined to do, more for the physical welfare and salvation of mankind than all other causes of man's comfort conceived in the mind and heart of man."

H. O. MARCY, of Massachusetts, offered the following preamble and resolution, which was referred to the Business Committee: *Whereas*, This Association has long recognized the advantages to be had from the more intimate relation between the State Medical Societies and the American Medical Association; it is hereby

Resolved, That we request the various State Medical Societies to perfect their local organization so as to include, as far as possible, in the membership of their district societies every regular practitioner within the State. That these local societies shall actively coöperate in urging a general attendance upon the annual meetings of the State Societies; that the date of the same be so fixed that it shall not interfere with the attendance of those members who are delegates and members of the American Medical Association, in order that a general unification of the interests of the medical profession of America be promoted, and the American Medical Association become, in a yet higher degree, the exponent of the profession; that we also request the State societies to unite in establishing a uniform standard of professional requirement for admission to the practice of medicine, and to aid, as far as possible, in advancing the scientific status of the same by the appointment of State Examining Boards, independent of the teaching faculties of the Medical Colleges. To this end, we further direct that the Permanent Secretary of the American Medical Association enter into correspondence with the Secretaries of the several State Medical Societies, and furnish, annually, a written report of the membership of the State Societies and the working effectiveness of their organization.

The report of the Librarian, G. W. WEBSTER, of Illinois, was, in his absence, read by the Secretary, and was referred to the Business Committee. Having briefly reviewed the terms of the transfer of the library of the Association to the Newberry Library of Chicago, which had been ordered by the Association at its last meeting, the deposit to be made permanent as long as the books were properly cared for, he said he had ascertained that the Trustees of the Newberry Library absolutely refused to accept the books unless they were made a permanent deposit without reservation. He therefore submitted an agreement which embodied the feature of permanency, and provided that while the books and pamphlets should be treated as the property of the Newberry Library, they should be so marked as to show that they belonged to the collection received from the American Medical Association. This regulation should also apply to all books and pamphlets which are deposited with the Library.

E. E. MONTGOMERY, of Pennsylvania, then read the report of the Board of Trustees. Having congratulated the Association upon safely weathering the financial depression of the past year, he stated that, after paying all bills, the treasury of the Board showed a balance of \$1,885.10. Notwithstanding the successful management of the board, the speaker said that it had been unable to escape criticism, and that at this meeting the Judicial Council had been asked to censure it for its conduct in publishing questionable advertisements. Nothing had presented greater difficulty to the Board than the decision as to what should be considered proper matter for the advertising department of the Journal. In reaching a decision, they had been guided by the general rule that no advertisement would be inserted which would not also appear in the *British Medical Journal*, the *Boston Medical and Surgical Journal*, the *New York Medical Journal*, the *Medical Record* and the *Medical News*. At a former meeting the attention of the Trustees was directed to the fact that the Code of Ethics prohibits all commendatory mention or advertisement of proprietary preparations, and instructed them to respect this prohibition in the conduct of the Journal. The Board had complied with the letter of the law in demanding the formulæ of all proprietary remedies, but, being legally responsible for the financial obligations incurred, it had felt compelled to accept certain advertisements and to trust to the sense of justice of the Association in relation thereto. The speaker paid a high tribute to the energy and earnest efforts of the present editor, Dr. J. B. Hamilton, and, in closing, called attention to the fact that the post-office had decided that the Journal was not entitled to entry as second-class

matter, unless the annual dues of the Association could be termed subscriptions to the Journal. He therefore recommended that hereafter the \$5.00 annual dues shall be divided, apportioning \$1.50 for the general expenses of the Association, and \$3.50 as the annual subscription to the Journal; to non-members the subscription should be \$5.00 *per annum*. A motion to receive and adopt the report was made, when Edward Jackson, of Pennsylvania, moved to amend by substituting that it be received; that thanks be tendered the Trustees; that their suggestions be adopted, "but that the Association does not approve of the policy of the Trustees with regard to advertisements." The amendment was laid on the table, and the report was then adopted. The proposed Constitution was made a special order for 10:30 A. M. on Thursday, and the Association then adjourned.

THIRD DAY—THURSDAY, JUNE 7TH.

Report of Committee on Revision of Constitution.—The Association having been called to order, H. D. HOLTON, of Vermont, Chairman of the Committee on Revision of the Constitution, read the report of the majority of the committee. This report was, in substance, similar to that which has been published in THE MEDICAL TIMES during the past year. Several changes had, however, been made; the most important being an apparent abandonment of the hybrid Nominating Committee, consisting of the Business Committee, plus representatives from the different states and territories as now selected, and the retention of the present method alone. A further provision was made, that affiliated societies would be entitled to one delegate for every five of its members, and one for every additional fraction of more than one-half of that number. Any member having served for two years as a delegate would henceforth be entitled to vote at all annual meetings, the voting power, as at present, being reserved to the delegates.

H. D. DIDAMA, of New York, read the minority report, which retained the present representation by delegates, the present formation of the Nominating Committee, and, while expunging a great deal that was now unnecessary amongst the various resolutions, adopted, combined and retained that which was most essential in these resolutions and in amendments that had been, from time to time, embodied in the present constitution.

Both reports having been submitted to the house, E. D. FERGUSON, of New York, moved that the minority report be substituted for that of the majority. This precipitated a rather irregular debate, in which many members wanted to talk at the same time, some even making a feeble attempt to do so. The Chair having stated that the adoption of this motion would simply present the minority report for consideration, the excitement calmed down, and, a vote being taken, the motion was adopted by a vote of 160 to 70. G. F. JENKINS, of Iowa, then moved that the, now majority, report be accepted and adopted as a whole. There is no doubt whatever that this motion could have been carried, but the audience was fast becoming excited, and those to whom the fortunes of the minority report had been confided were decidedly "rattled." The confusion was increased when BERGSTEIN, of Nevada, moved to amend, "that the Constitution and amendments be read and considered, section by section, in comparison with the present Constitution." This suggestion which would obviously occupy the two remaining sessions without, perhaps, arriving at any conclusion, was met with a storm of dissent, amidst which Dr. Bergstein's powerful voice could be heard protesting that he was not an obstructionist, but simply wished to have some clear idea of what he was voting upon. His admission that he had never read the present Constitution restored general good humor, and the amendment was defeated, 158 to 100. There were many present who seemed anxious to participate in the debate, and a resolution by H. P. NEWMAN, of Illinois, that no one should speak more than once on the subject, and only for three minutes, the mover of a resolution to have five minutes, was promptly adopted. W. E. QUINE, of Illinois, took the platform, and in a very forcible speech opposed the adoption of the minority report. He made the usual statements, that the present Constitution of the Association was responsible for its slow growth and limited membership, and that a more liberal policy, which, however, was not defined, would result in gathering in the 100,000 physicians in the United States to form one grand association.

Comparisons were drawn between the British and the American Medical Association, in which the former was credited with a membership of 20,000. Other statements were made of an equally unreliable character, but the presentation of the speaker's case was good. X. C. SCOTT, of Ohio, spoke in favor of the minority report, and he was followed by MARCY, of Massachusetts, JACKSON, of Pennsylvania, and FERGUSON, of New York, who endeavored to indicate the importance of the changes in the minority report, and the grave disasters that would result from the adoption of the document presented by Dr. Holton. J. W. GRAHAM, of Colorado, moved to lay the whole matter on the table. This was promptly voted down, 128 to 84. SCOTT, of Ohio, then moved the previous question. The ayes and nays were demanded, and a roll call was ordered. This consumed a great deal of time, and it was soon evident that the roll, as presented, was not free from errors. The names of some were called who were not delegates, while others who were delegates, and in attendance, were omitted. This was subsequently explained through the fact that on the first day an accurate record of delegates was not maintained at the Registration Bureau. The total vote cast was 215; ayes, 151; nays, 64; necessary to carry, 154. THE CHAIR declared the motion lost. E. D. FERGUSON, of New York, then offered as an amendment to the by-laws to insert the words, "annual subscription to the Journal of the Association," for the words "annual dues", wherever it might occur. This was to cover the point raised by the Trustees in connection with the entry as second-class matter of the Association Journal. The motion was adopted unanimously, and the Society then adjourned until Friday morning at 10:30. There is little doubt that the minority report as a whole could have been adopted at this session, had there been better management on the part of those supporting it. So much confusion had been created by the various speakers, motions and amendments, that at times but few knew exactly the question that was being voted upon. Dr. Ferguson is entitled to credit for endeavoring to make these clear by questioning the President as to the result of a vote about to be taken, a course in which he persisted most perseveringly, in the face of considerable protest from the opposition. Notwithstanding this, however, many of the western men were led astray, and it is reasonable to suppose that the necessary three votes could have been obtained had the matter been put more directly.

FOURTH DAY—FRIDAY, JUNE 8TH.

The Association was called promptly to order by the President, when the Chairman of the Committee of Arrangements had something to say about transportation matters, as well as a word about the excursion on the Bay. J. B. ROBERTS, of Pennsylvania, then moved that all amendments to the Constitution and By-laws, now on the table, be postponed until the next meeting, which was adopted.

The report of the Committee on Revision of the Code being now in order, H. D. HOLTON, of Vermont, came forward and faced the largest audience that had yet assembled, while he read some of the "reasons" that had induced the majority of the committee to present the report, or rather the proposed Code that had already appeared in the Association *Journal*. The speaker quoted Marion Sims and Oliver Wendell Holmes, and very forcibly presented his side of the question, at times in pathological and figurative language. This committee desired "to avoid all reference to medical sects and irregular practitioners, because such reference sullies the dignity of the Code, and because it is a recognition of the existence of that which we believe should not exist, and because it is the most efficient means of perpetuating the objectionable condition." The speaker closed amidst hearty applause; and H. D. DIDAMA, of New York, the faithful minority of one, came forward and read his report. This, which had been presented by the speaker at Milwaukee, and which has already appeared in THE MEDICAL TIMES, still remained as his mature conviction upon the subject. He said: "A careful examination of the revised Code, as published in the *Journal*, had only served to confirm the opinion he had already expressed. He did not desire to occupy valuable time by pointing out the omissions from, alterations of and additions to the Code, which have received the signatures of the majority committee," but still very forcibly and earnestly he pointed out some of the more glaring of these. Certain varieties of advertising formerly condemned were actually commended by the revision, and he

had no doubt that many of his hearers had read "with surprise and grief" the statement "that the possessor of a license granted by a Board of acknowledged legal authority should not be refused consultation when requested by a patient." In closing, the speaker said: "Some of you of your own free will and accord and as loyal representatives of State societies, which have spoken with no uncertain sound, undoubtedly hold the opinion that legality and fitness are not interchangeable terms. Notwithstanding the ingenious arguments of the eminent gentlemen who constitute the majority committee, you are not convinced that consultations of regular physicians with irregular practitioners are proper or beneficial to the patient. The irregular may be honest and sincere. He may have received a collegiate education. He may be a pillar in the church. He may thoroughly know anatomy and chemistry and biology. He may be able to speak with the persuasive tongue of eloquent men and of angels. And yet if he, by ignoring or rejecting the rational materia medica and therapeutics, upheld by all regular physicians throughout the world, and professing to be governed in his practice by a metaphysical dogma, demonstrates that he and the regular doctor have absolutely nothing of any practical importance in common, some of you steadfastly believe that a pretended consultation in these circumstances would be, even if the patient desired it, an imposition and a swindle which no sophistry can rectify, no plea of liberality palliate, no fee recompense or excuse." The speaker retired amidst applause that fairly indicated in which direction the voting strength of the meeting lay.

E. FLETCHER INGALS, of Illinois, caught the President's eye, and moved to lay the minority report on the table. This was promptly rejected, and X. C. SCOTT, of Ohio, moved that the minority report be substituted for that of the majority. This was carried by a substantial vote, and the announcement of the fact by the Chair was a signal for an effort at recognition by many speakers. It was quite evident that the same condition of affairs that occurred during the progress of the debate on the proposed Constitution was now inevitable. The supporters of the minority report were divided as to the best course to pursue, and, mistrusting their strength, were afraid to risk a vote on its adoption. On the other hand, Dr. Ingals, who appeared to lead the opposition, was camped at a convenient distance from the minority supporters, and with a copy of "Robert's Rules of Order" in his hand, was not to be caught napping. It was strongly urged, by those who believed they knew the temper of the meeting, that a decisive vote be taken on the adoption of the report. But the "minority" was too faint-hearted, possibly realizing how much they had at stake, and yet forgetting that even defeat on this motion left them the opportunity to defeat a motion for the adoption of anything else. It was therefore decided that the best course to pursue was to move the indefinite postponement of the consideration of the report. This motion having been reduced to writing by the mover, was then offered, and was seconded by Scott, of Ohio. His voice was, however, not heard by the general assembly, while that of HOLTON, of Vermont, sitting in the front row, who at once rose to second it, was heard all over the hall. The motion was received with loud murmurs of dissatisfaction from every direction, but especially from the extreme right of the hall, where the greater number of the California delegates were sitting. These expressions were heard, and probably misinterpreted, by the "minority," who were attacked with paresis at the action of Dr. Holton, the Chairman of the majority, in seconding their motion. Evidently there was something horribly wrong here, and the confusion was not diminished when Ingals, still holding fast to his "Rules of Order," said: "You have made a mistake. This motion is not as strong as mine." There was a short pause, and then, amidst the rising murmurs from all sides, the minority leaders asked the mover of the resolution to withdraw, which he attempted to do, naming Dr. Scott as his seconder. This was disputed, but the Chair granted the request, and the motion was withdrawn, amidst mingled laughter and disapprobation. Dr. Ingals then put his motion to lay on the table, which was adopted, 135 to 30. This ended the question of the Code for the present session, and the comments on the action of the supporters of the old Code were rather severe. It is very evident that here in the house of its friends, and with every certainty of adoption, the report of the minority was needlessly sacrificed. There was hardly a delegate from California who desired any change, nor one who would have permitted it as long as it was possible to vote against it. The instructions of the State Society, and of

many of the local societies were so positive as to leave no discretionary power. It was simply a case of want of confidence, and an opportunity was lost to California of definitely recording herself as opposed to sophistry and fraud in the conduct of every-day professional life.

The report was received and adopted without any very marked enthusiasm.

EDWARD JACKSON, of Pennsylvania, offered the following preambles and resolution: WHEREAS, The *Journal of the American Medical Association* has continued to publish unethical advertisements, like those of "Antikamnia," "Labordine," and other secret nostrums, and that of the American Physicians' Sanitarium Company, offering one hundred dollars' worth of stock to physicians sending it to patients; and whereas, the Trustees of the *Journal* have defended such a course on the grounds that the money from such advertisements was needed to publish such a journal as they thought creditable to the Association, Resolved, That the various State Medical Societies in affiliation with this Association are hereby requested to inform this Association whether their members approve the policy of admitting such advertisements to the pages of the *Journal of the American Medical Association*.

The speaker explained that he took this action because he was so instructed by the Pennsylvania State Medical Society, and he reminded the Association that he was the representative not only of the largest State Medical Society, but also of that one showing the largest proportion of members in relation to constituency of any in this country. He had endeavored to bring this matter up at a previous session and had been defeated, and he now brought it forward in the hope that members would see the matter more clearly. There was a good deal of feeling displayed even on the part of some adherents to the "new Code at any price" party. X. C. SCOTT, of Ohio, moved to lay the matter on the table, which was defeated, 113 to 102. It was very evident that the sentiment was strong on this question and many members were canvassing the situation in their seats. Those who were opposed to the obnoxious advertisements were uncompromisingly so in their opposition, while those on the other side were not very hearty in voicing their opinions. There were several speakers, amongst whom the editor of the *Journal* was prominent. Then DR. C. H. HUGHES, of Missouri, took the floor to state that he had no connection with the obnoxious sanitarium company, from which he had at once resigned on ascertaining its nefarious character. He appealed in winning accents to the Association not to embarrass its Judicial Council, and inquired in guileless tones why it should not be treated with confidence and respect. Then, in an emphatic manner, he asserted that this Council had summoned before it the Board of Trustees, implying that said Board already dreaded the fate that was in store for it. Several people seemed to have heard of Antikamnia, though one speaker who said "every physician used it," was greeted with a loud murmur of disapprobation. It was, however, evident that this unethical product had friends in the house, and the Chairman of the Committee of Arrangements was smiling blandly on the audience as he held in his hand an Antikamnia Visiting List, from which he had just been reading to the Association. Some one then explained that Dr. Jackson was mixing up two questions, which, if separated, could soon be decided. The preambles really related to the action of the Judicial Council, while the resolution was independent of their action and could be adopted independently. Finally the resolution was referred to the Judicial Council, the preambles having been stricken out.

It was very generally felt that the action of the Association, or rather of the opposing parties, in declaring a "draw" on the question of revision of Constitution and Code, was very unfortunate, leaving, as it did, a heritage of trouble for Baltimore. The situation was certainly not good and it was decided to make an effort to remedy things. H. O. MARCY, of Boston, who, when President of the Association two years ago, had appointed the now divided committees, after a brief speech, moved to take from the table all matters pertaining to the Constitution, By-laws, and Code of Ethics. The supporters of revision were, however, suspicious, and the motion was only adopted by a narrow majority, 100 to 91. Dr. Marcy then moved to indefinitely postpone the whole matter, and the motion was carried without a dissenting voice. Most people breathed a sigh of relief, the more sanguine congratulating themselves on the fact that the matter was settled, at least for some years, but Ingals, who, in reply to the inquiry "where are we at?" had said, "just where we were before,

ready to begin again;" added that Banquo's troubled spirit was not laid, and it seems evident that "the ghost will walk" at Baltimore or at some subsequent meeting.

DR. W. T. BISHOP, Chairman of the Committee on the President's Address, made the following report: The Committee to whom was referred the address of our President, James F. Hibberd, M.D., LL.D., Richmond, Indiana, respectfully reports: The change of date from May to June, 1894, is approved. Credentials might be issued in duplicate, one copy given to delegate, and one copy or list of delegates, with power of substitution, forwarded to Secretary of American Medical Association, and he to furnish list of recognized bodies to Committee of Registration, the effort to be, as the President suggests, to get all members of the regular practice into the American Medical Association through State and county societies. With the President we cannot approve the turning of the Association over to the control of the Sections; the Sections should remain as they are and have their own officers, etc., as now provided for, the Nominating Committee representing men who are in the general or special practice of their several States and counties, are sure to select proper officers, having done it for fifty years, the Association not being bound to accept the officers named, having the power to amend the report of the Nominating Committee or refer it back for correction. The American Medical Association should invite the attention of the Congress of the United States of America, as represented in the Senate and House of Representatives, to the fact that we are opposed to the reduction of medical men from 125 to 90, or any other number less than at present provided for, 125 assistant surgeons; let the officers of our Association and the officers and members of State and county societies at once act; this is a matter of great importance to the army and the country at large. The appropriation to index catalogue and library should be increased, as before the proposed reduction, to \$10,000. The whole profession in this country, as well as Europe, are interested in this subject. We urge the continuous effort for the Department of Public Health, but recognize that if organized, it, like bills organizing State Boards of Medical Examiners, will either lack much that we desire or contain much that we do not desire. We want a Department, and can repair or improve it afterward. This last may take time, and all will require some money to secure what we wish—the money and labor, etc., now spent must be secured by further effort. The effort should be made at all times to promote vaccination and establish proper sanitary conditions—the physician in his daily practice has much to do with preventing disease; the large population that is "on the move" makes it necessary that every good citizen should be on guard to prevent the spread of disease and crime. Since our last meeting some States have provided for a Board of Medical Examiners, who will examine all who come into their State to practice medicine; the Board to be composed of members of the profession, but not connected with any teaching institution. The medical profession and the world at large require from the practitioner more than ever before, knowledge founded upon education. The microscope and the cultures of the investigator make certain what was once surmised. The attention is called to the constant amendments that are being offered to the Code and Constitution, and the members are warned to avoid ill feeling in the discussion of these questions. The address in general is most heartily approved.

The report was adopted. The language of the report, however, is not quite clear where it says: "With the President, we cannot approve the turning of the Association over to the control of the Sections." The impartial reader will rather hold that the President decidedly approved of that course and argued in support of it.

L. DUNCAN BULKLEY, of New York, as Secretary of the Business Committee, presented the following report:

The Business Committee recommends to the Association the adoption of the accompanying resolution of Dr. Marcy, which was referred to it. It also recommends the adoption of the agreement with the Newberry Library of Chicago in regard to the transference of the Library, with the alteration made upon it that the future deposit of books, etc., be optional with the Association and not obligatory. The Committee also recommends the adoption of the following resolution in regard to the issuing and printing of the official program for the annual meeting:

Resolved, That the official program containing the appointments for the general sessions and the work of the sections shall be printed at the office of the *Journal* of the Association, and in order that this may be accomplished, the officers of the sections and the Committee of Arrangements shall transmit the program of the business and scientific proceedings so that it shall be in the hands of the Permanent Secretary of this Association at least one month before the date of each annual meeting. The list of entertainments shall be prepared by the Committee of Arrangements, and, as far as practicable, shall be included in the official program.

The Business Committee also ask if they are empowered to receive business directly from the sections before it has been presented to the Association, and if such is not included in their present authority, ask that the same be granted, as it believes that much time will thus be saved, and the work of the Association forwarded. The Business Committee, to which was referred the suggestions contained in the Treasurer's report, recommend as follows: (1) That the Constitution be amended in that portion relating to the necessity of electing to office only those who are present at a meeting, so that the Treasurer be not thus included. (2) That the Treasurer receive compensation commensurate with the services required of him, and recommend that three hundred dollars (\$300) be appropriated for that purpose. The third suggestion, regarding delinquency in the payment of dues, the Committee consider has been already met by the change in Constitution passed yesterday, so that no further action thereon is necessary. The Committee recommend that the Board of Trustees appropriate \$300 for the salary of the Permanent Secretary. The officers for the ensuing year are: Chairman, Dr. E. E. Montgomery, Philadelphia; Vice-Chairman, Dr. J. M. Duff, Pittsburg; Secretary, Dr. L. Duncan Bulkley, New York.

The report was adopted by the Association.

The Address on Surgery and that on State Medicine were read by title, the authors being absent and neither having seen fit to send his address. This rather discourteous course should be prevented in future. The addresses are a prominent feature of the meetings, and the selection of the person to deliver them is an honor highly valued, and it should not be lightly treated. At the present session it would have been difficult to find time for these papers, as the full limit of the session was always occupied with the various matters under discussion.

JEROME COCHRAN, of Alabama, the Chairman of the Nominating Committee, presented its report, the following being nominated as officers for the ensuing year:

President.....	DONALD MCLEAN, Michigan.
First Vice-President.....	STARLING LOVING, Ohio.
Second Vice-President.....	WM. WATSON, Iowa.
Third Vice-President.....	W. B. ROGERS, Tennessee.
Fourth Vice-President.....	F. S. BASCOM, Utah.
Treasurer.....	H. P. NEWMAN, Illinois.
Permanent Secretary.....	W. B. ATKINSON, Pennsylvania.
Assistant Secretary.....	GEO. H. ROHÉ, Maryland.
Librarian.....	(election passed.)
Place of meeting.....	Baltimore, Maryland.
Chairman Committee of Arrangements.....	JULIAN J. CHISHOLM, Maryland.
Board of Trustees: JOS. EASTMAN, Indiana; J. T. PRIESTLY, Iowa; D. W. GRAHAM, Illinois (full term); J. E. WOODBRIDGE, Ohio (unexpired term); J. W. GRAHAM, Colorado (<i>vice</i> D. C. PATTERSON, deceased).	
Judicial Council: D. W. CROUSE, Iowa; R. C. MOORE, Nebraska; T. D. CROTHERS, Connecticut; G. B. GILLESPIE, Tennessee; W. T. BISHOP, Pennsylvania; C. H. HUGHES, Missouri; I. J. HEIBERGER, D. C.; H. BROWN, Kentucky (unexpired term).	
Address in Medicine.....	W. E. QUINE, Illinois.
Address in Surgery.....	C. A. WHEATON, Minnesota.
Address in State Medicine.....	H. D. HOLTON, Vermont.

X. C. SCOTT, of Ohio, moved that the Trustees be instructed to publish every other week in the Association *Journal* the explanatory declaration relative to the Code of Ethics [*vide* pp. 19 and 20 of Code]. This was received with some derision by the revisionists, who said the speaker was blowing hot and cold in

opposing revision and in requesting the publication of this matter. It was suggested that the clauses mentioned be published every issue, and the resolution passed in this shape.

Amendments were offered to the Constitution, one by QUMBY, of New Jersey, striking out the words "surgical instruments or" from Section 5, Article 9. These were laid over.

The Special Committee appointed to petition Congress to create a Department and Secretary of Public Health, of which C. G. COMEGYS, of Ohio, was chairman, presented its report. The work of the committee during the past year was reviewed and progress reported. In endeavoring to secure the passage of the bill already submitted to the Association the committee encountered strong opposition from the Chief of the Marine Hospital Service, who believed it encroached upon the functions of his office, as director of quarantine affairs. The apprehension of the entrance of Asiatic cholera, and the consequent strengthening of the quarantine service, rendered it inadvisable to make any further effort during that session. In September, 1893, the bill was brought before the Pan-American Medical Congress, and the Committee on State Medicine recommended its adoption, there being only one dissenting voice. The committee concluded that in order to avert the opposition of the Marine Hospital Service it would be wise to reconstruct the bill, leaving out any reference to the supervision of the quarantine service. The bill, as re-drafted, had been introduced at the present session of Congress. The success of the bill had been greatly compromised by the action of the New York Academy of Medicine in its endeavor to frustrate the Association by pushing bills of its own, which proposed to keep the profession under the autonomy of either the Secretary of the Treasury or of the Secretary of the Interior. In conclusion, the speaker said that it was not probable any bill could pass at this session of Congress, but the Association should be ready to make the most powerful effort possible at the next session. In consequence of ill health Dr. Comegys tendered his resignation. The committee offered the following resolutions:

Resolved, That the American Medical Association renews its appeal to the Congress of the United States to adopt the bill now in its possession for the creation of "A Department and a Secretary of Public Health."

Resolved, That the committee proceed as soon as possible to secure sub-committees in each congressional district of the country to obtain a favorable action on the part of their Senators and Representatives for this measure.

Resolved, That a committee be appointed to endeavor to secure the friendly coöperation of the New York Academy of Medicine.

Resolved, That a sum not exceeding four hundred dollars be appropriated to defray the necessary expenses of the committee in carrying on their work.

The report of the Committee appointed by the American Medical Association to act in conjunction with a Committee of the American Public Health Association, was, in the absence of the Chairman, U. O. B. WINGATE, of Wisconsin, read by JEROME COCHRAN, a member of the Committee. He said: The Committee had met with the American Public Health Association and had found that there was, on the part of that body, a disposition to take no further action in the matter. It was impossible to convince the members of the two Committees that no lesser office than that of Secretary of Public Health in the Cabinet of the President should be encouraged. The following resolution was therefore submitted, and was adopted by the American Public Health Association, as a compromise between the two factions of the Joint Committee:

Resolved, That the American Public Health Association again urge upon Congress the necessity of the appointment of some officer with general sanitary authority in connection with the national government; That the functions of such an authority are of sufficient importance to demand the exclusive attention of the best instructed sanitarian; That such authority should be enabled, from time to time, and under proper regulations, to secure the advice and coöperation of the State Boards of Health.

Dr. COCHRAN presented a communication from the Medical Association of the State of Alabama, which is also the State Board of Health, strongly favoring the passage of the bill now before Congress, and suggesting the insertion of a clause providing for an annual conference of State Boards of Health at Washington. On motion of CHAS. DENISON, of Colorado, the reports were received, the addition proposed by Alabama accepted, the resignation of Dr. Comegys, as

Chairman, accepted, and Dr. Cochran appointed in his stead. The section on State Medicine presented resolutions in relation to the death of JOHN H. RAUCH, of Illinois, which were concurred in by the Association. The Section on Materia Medica and Pharmacy, presented the following resolutions, which were, on motion, adopted:

Resolved, That the American Medical Association directs the attention of the medical colleges of this country to the general neglect of the study of botany by medical students, and that it is the sense of this Section that the teaching of general descriptive botany should be made a part of the curriculum of study in every medical school. The delegates present at this meeting from the American Pharmaceutical Association concur in this action.

Resolved, That the American Pharmaceutical Association be invited to contribute to the *Journal of the American Medical Association* reports of and examinations of proprietary and secret nostrums, made under its direction. The officers of the Section on Materia Medica and Pharmacy to act with a committee to be appointed by the American Pharmaceutical Association, as a Committee of Conference in order to carry this resolution into effect.

The Secretary read the following list of officers nominated by the various Sections, to serve during the ensuing year:

Practice of Medicine—Chairman, E. W. Kellogg, Milwaukee, Wis. Secretary, W. E. Quine, Chicago, Ill.

Surgery and Anatomy—Chairman, Joseph Ransohoff, Cincinnati, Ohio. Secretary, Reginald H. Sayre, New York.

Obstetrics—Chairman, F. H. Martin, Chicago, Ill. Secretary, X. O. Werder, Pittsburg, Pa.

State Medicine—Chairman, L. H. Montgomery, Chicago, Ill. Secretary, C. H. Sheppard, Brooklyn, N. Y. Executive Committee, C. A. Lindsley, New Haven, Conn.; H. S. Orme, Los Angeles, Cal.; J. J. Kinyoun, Washington, D. C.

Dermatology and Syphilography—Chairman, A. E. Regensberger, San Francisco. Secretary, D. H. Rand, Portland, Oregon. Executive Committee, L. D. Bulkley, New York; L. A. Duhring, Philadelphia; A. H. Ohmann-Dumesnil, St. Louis, Mo.

Dental and Oral Surgery—Chairman, M. H. Fletcher, Cincinnati, Ohio. Secretary, E. S. Talbot, Chicago, Ill.

Ophthalmology—Chairman, Edward Jackson, Philadelphia. Secretary, H. V. Würdemann, Milwaukee, Wis.

Neurology and Medical Jurisprudence—Chairman, Daniel R. Brower, Chicago, Ill. Secretary, W. J. Gavigan, San Francisco, Cal. Executive Committee, John W. Givens, Blackfoot, Idaho; T. D. Crothers, Hartford, Conn.; A. E. Regensberger, San Francisco, Cal.

Laryngology and Otology—Chairman, J. F. Fulton, St. Paul, Minn. Secretary, T. J. Gallagher, Pittsburg, Pa.

Diseases of Children—Chairman, Edward H. Small, Pittsburg, Pa. Secretary, Geo. W. McNeil, Pittsburg, Pa.

Materia Medica and Pharmacy—Chairman, W. L. Whelpley, St. Louis, Mo. Secretary, George F. Hanson, San Francisco, Cal. Executive Committee, F. Woodbury, Philadelphia; F. E. Stewart, Watkins, N. Y.

Physiology and Dietetics—Chairman, E. H. Woolsey, Oakland, Cal. Secretary, Chas. G. Chaddock, St. Louis, Mo. Executive Committee, I. N. Love, St. Louis, Mo.; W. T. Bishop, Harrisburg, Pa.; Ephraim Cutter, New York.

The nominations were confirmed by the Association.

The business of the meeting having been concluded, DR. R. H. PLUMMER, the Chairman of the Committee of Arrangements, now came forward to make his final report. He said that the attendance had far surpassed the expectations of his committee, about 1,200 delegates, visitors, and ladies having registered. The success of the meeting had been most gratifying, and he heartily thanked all for their presence in San Francisco.

DR. H. D. HOLTON then offered the following resolutions, making some very flattering remarks, while congratulating Dr. Plummer on the very successful results of his efforts:

Resolved, That the most cordial thanks of this Association are due and are hereby tendered to the profession of California, the medical societies, the citizens of San Francisco, the Directors of the Midwinter Fair, the railroad officers, and all who have so generously contributed to make our visit to the Pacific

Slope successful, pleasant, and a memory that will live to cheer us during all our lives.

Resolved, That the thanks of the Association are hereby tendered to the President, Secretary, and other officers who have contributed to make this one of the most successful meetings in the history of the Association.

The resolutions, which were seconded by DR. H. O. MARCY in similarly complimentary terms, were unanimously adopted.

THE PRESIDENT then appointed DR. HOLTON and DR. L. C. LANE as a committee to escort the President-elect, DR. DONALD MCLEAN, of Michigan, to the chair. Dr. Mclean, on being presented to the Association, spoke in very feeling terms of the honor conferred upon him, and sincerely hoped that he would see all here present at Baltimore. Some one then moved to adjourn, but PRESIDENT HIBBERD, in his own inimitable way, said the motion was premature, as he himself had a speech to make. He then complimented the members upon their exceedingly good behavior, thanking them for their kind consideration towards the Chairman, and added so easy had been the task that he would not mind doing it every year.

The Association then adjourned to meet in Baltimore on the first Tuesday in June, 1895.

THE ENTERTAINMENTS.

As soon as it was definitely announced that the American Medical Association would hold its meeting of 1894 in San Francisco, it was generally felt that the visitors should be entertained in a manner commensurate with the reputation of the State. It was early determined that no contributions should be solicited from sources outside the profession, and a systematic canvass of physicians throughout the State was undertaken by the Committee of Arrangements. Societies and individuals were solicited to contribute, and as a result of this and of the generous liberality of the State and of the San Francisco County Medical Society ample funds were raised. Entertainments were given by members of the profession, by the medical colleges, and by professional organizations. Every one seemed satisfied, but it would be out place for us to more than indicate the nature and character of each, leaving to our visitors the judgment of the result.

On Monday evening, June 4th, an instrumental concert was given at the headquarters of the Association, Palace Hotel, by Noah Brandt's orchestra. Many of the travelers who had been delayed on belated trains had arrived, and the occasion was one of general reunion.

Tuesday afternoon the visiting ladies were given a drive through Golden Gate Park, along Ocean Beach, and home by the Cliff House and Presidio. A very large number of the visitors availed themselves of this occasion to see the beauties of the park and ocean, and the carriages, when ready to start, made a most imposing cavalcade.

In the evening the San Francisco County Medical Society gave a reception at Pioneer Hall, which was so largely attended that the capacity of the building was taxed to its utmost, and the commissariat completely exhausted. Owing to the arrangement of the building every one was enabled to enjoy himself as he pleased. In the large hall dancing was kept up till a late hour. In the upper rooms where the State Mining Bureau's collection of minerals is displayed, members congregated to discuss the weighty affairs of the Association, and we are informed there was also a "place" downstairs where an efficient and hospitable committee welcomed all who came.

On Wednesday the time was pretty well filled, in fact it was impossible to assign separate hours for all. In the afternoon the Ladies' Reception Committee gave a "Tea" at the residence of Mrs. R. A. McLean, whose beautiful home was crowded with the visitors.

That evening Cooper Medical College received the Association. The college building with its magnificent auditorium and the Lane Hospital, now almost completed, were thrown open to all who came. The dissecting room was too much for some of the visitors, though far less odoriferous than such places usually are. For over three hours a most thorough inspection of the premises was in progress, the hospital in particular coming in for a large share of attention. Early in the evening Dr. Lane, the President of the College, as well as

its founder and constructor, delivered a brief address, giving some details of the work that had here been accomplished in the cause of medical education. The absence of Dr. N. S. Davis, who had been detained at home in consequence of sickness in his family, was universally regretted, but more especially on this occasion, as it had been arranged to make it a demonstration of the feeling of the profession for his efforts in behalf of medical education.

During the evening a reception was given to the Association by Dr. W. F. McNutt, at his residence 1805 California street. Nothing was spared to make the entertainment fitting to the occasion. Music was provided for dancing, and the large number of young people present made the evening scene a gayer one than the larger and more informal reception of the night before. Dr. McNutt's contribution to our hospitalities was certainly most generous and effective.

Thursday morning it had been arranged that the ladies should visit the Mid-winter Fair, but as the Association was down for the same event that evening many of the ladies visited points of interest in the city, some of them taking in the sights in Chinatown.

During the afternoon and early evening Mrs. L. C. Lane received the Association and a number of visitors at her residence, corner of Clay and Buchanan streets.

At 8 P. M. several hundred people left the Palace Hotel bound for the Mid-winter Fair. The grounds were illuminated and all the buildings open. In every direction could be seen the button of the Association, and the visitors very thoroughly inspected the displays in the various departments. Horticulture and Mining, the two most important sections, coming in for most attention. At 10 o'clock light refreshments were served in Festival Hall. Here again the demands by the unexpected attendance were greater than could be supplied, and the refreshments were soon exhausted. On first assembling in the hall there was some speechmaking, but of an informal character, everything being brief and to the point. The electrical display was very fine, both tower and fountain being in operation. The evening was unusually fine; the fog failing to interfere with the festivities.

On Friday afternoon Mr. Adolph Sutro, whose daughter and son-in-law are members of the profession, entertained the ladies at Sutro Heights. Luncheon was served in the new Pavilion of the Sutro Baths, an orchestra being present throughout. Mr. Sutro was an excellent host and acquitted himself well when replying to a vote of thanks unanimously tendered by the guests.

In the evening the Medical Department of the University gave a reception at the Hopkins Art Institute, which, being the property of the University, was obtained for the occasion. The beautiful mansion was illuminated throughout and the scene, during the evening, was a very brilliant one, the large central hall, and indeed all the rooms, being thronged with visitors. There was again a shortage in the commissary department. One of the hosts said he had provided for 800 people, but it appeared as if twice that number had come. However, all were good humored, and the lighter refreshments held out till the last.

On Saturday, June 9, the profession of California, through the various medical societies gave an excursion on the bay, which was of a most enjoyable character. The steamer Newark, of the Southern Pacific Company, one of the largest and the fastest steamer on the bay, had been chartered for the occasion, and Noah Brandt's orchestra furnished good music to all who enjoy such a treat. Refreshments were served at ten o'clock and at any hour thereafter during the day, it being understood that the vigorous atmosphere of the water would "conduce to appetite." Having visited all points of interest around the lower bay and after making a short trip toward the Gate, the steamer headed for Mare Island, where everyone landed and made a hurried inspection of the navy yard and naval hospital, and some ships of the new navy, including the coast defense vessel Monterey. On reëmbarking, the vessel was pointed for home, and on the trip down the bay speech-making and singing beguiled the time. Warned by the generous attendance at previous entertainments, the Chairman of the Committee had provided amply in the matter of refreshments while the manner of serving them allowed all to have enough in comfort. No hitch occurred during the day and every detail seems to have been most carefully looked after, the visitors expressing their most hearty appreciation of the occasion of their visit to the coast, as well as their determination not to again remain so long away.

During the meeting there were several entertainments of a private character. Amongst these were a breakfast given to the Section on Obstetrics and Diseases of Women, by the San Francisco Gynecological Society, at the Baldwin. The Annual Dinner of the Sections on Ophthalmology and Laryngology took place on Wednesday, at the California Hotel. Dr. H. M. Sherman gave an "orthopedic dinner," to which some of the surgical fraternity were also invited. There were other and smaller entertainments, every one endeavoring to contribute his share to the general good fellowship.

CORRESPONDENCE.

The Tuberculin Test for Tuberculosis in Cattle.

DEAR SIR: During the latter part of last May some experiments with the tuberculin test were made at the dairy of the State Insane Asylum at Stockton, to which considerable public interest was drawn, and which caused some alarm among people in general, and dairymen in particular, with regard to the prevalence of consumption among the dairy cattle of the State and the danger of communication of the disease through milk. The experiments were made at the direction of the President of the State Board of Health by a veterinary surgeon, who injected the tuberculin in eleven animals which, with the exception of three, had at some time showed symptoms of disease. The temperature was taken in the rectum every hour for about 24 hours following the inoculation. Six out of the eleven animals showed a rise of temperature of 3.5-7° F. eight to fifteen hours after the injection. Three animals gave no fever reaction to the test. From this it was concluded by those making the experiments that six out of the eleven animals were tuberculous. Five days after the injections had been made an autopsy was held on two of the cows, which had reacted to the test with a temperature of about 105° and 107° F., respectively. The first cow showed a general tubercular infection of the lymph glands about the neck, thorax and abdomen, and of the serous membranes of the pleural and peritoneal cavities, the latter being covered with numerous miliary tubercles. In the second cow the infection was not so general, nor was the fatty degeneration so far advanced as in the first; nodules were found in lungs and liver, but the peritoneum was free. The germ of tuberculosis was found in the tubercles of the lungs. Three weeks after these autopsies had been made, one of the large bulls of the asylum, a very large, fat and healthy looking animal, which had reacted to the tuberculin test with a temperature of over 105° F., was killed. The animal commenced to show symptoms of disease a week after the inoculation, and as its horns had been sawed off about this time its sickness was ascribed to this. A careful *post-mortem* examination was made, but not a trace of tuberculosis was discernable in any part of the body. A large abscess was, however, found under the skin, covering a large part of the shoulder of the animal and extending up the neck and down the leg to the knee. The center of the abscess answered to the point of insertion of the needle in making the injection of tuberculin. The results of the experiment at Stockton do not, therefore, as far as three of the eleven animals are concerned, speak very highly for the reliability of the tuberculin test. It might be a question whether the method employed would account for the rise of temperature in an animal which afterwards proved to be free from tuberculosis, as it was not confined to strict antiseptic precautions; no cleansing of the skin was made where the animals were inoculated, nor was the syringe sterilized after each injection. The amount of tuberculin injected was 20-30 gtt., according to the weight of the animal, which some writers consider quite large, four drops being sufficient to stimulate the tuberculous tissue into activity and cause a notable rise in temperature. The reports of experimenters with the tuberculin test differ greatly. Some have reported the test to be infallible, "without a single failure," but many others have met with varying results. Thus, Pang injected 53 animals, in 41 of which the *post-mortem* examination disclosed tuberculous disease. Of these 41, 38 gave a typical reaction; in three the reaction was insufficient. Of 12 healthy animals two gave a very insignificant reaction. Lyttin injected 80 animals selected at random. Of these 18 showed reaction, of which 17 were

found tuberculous. Roeckl and Schultz injected 60 animals, with a positive result in 51. Of these, 43 were found tuberculous. Of 15 animals with a negative result, four were found with the evidence of the disease. The *New York Medical Journal* of June 9, 1894, contains an excerpt from the German journal, *Hyg. Rundschau* (February 15, 1894), giving the results of an experiment by Dr. Rievel, as follows: Six heifers were bought for experiment. Of these, three reacted to tuberculin injections, their temperatures being thereby raised from 1.8° to 4.8° F. These three seemed tuberculous, and were therefore slaughtered. Careful expert veterinary examination revealed in two of them acute bronchial catarrh, but neither tubercles or bacilli. In the third heifer (not the one that showed the highest temperature) a few bacilli were demonstrated in tubercles found in the lymph glands. From these, and another similar experience, the inference is drawn that tuberculin is not uniformly reliable as an indicator. The results of Roeckl and Schultz are similar to which is claimed to be an average of the results with the tuberculin test, namely: that in nearly 15 per cent. of the cases giving a positive result no tuberculosis is found, while in the animals that give no reaction about 10 per cent. are found to be tuberculous. The question, whether the tuberculosis may be communicated by injection of the meat of the tuberculous cows is most probably to be answered in the negative. Dr. C. G. Currier writes in the *New York Medical Journal* of June 9, 1894, that red flesh of tuberculous cattle is not apt to carry the infection, the blood being quite free from infecting bacilli. In the case of pork from a tuberculous pig the danger seems to be greater. Sajous' "Annual of the Universal Medical Sciences for 1893" (vol. I, A 12) reports some experiments by Dr. Perroncito, who thoroughly investigated the possible danger from the ingestion of the flesh of tuberculous animals. He inoculated two hundred rabbits, as many guinea pigs, and two oxen, with the fluid obtained from the muscles of tuberculous pigs. None of these animals became tuberculous. Eighteen young pigs were fed for a period of four months with the flesh of tuberculous cows. On *post-mortem* examination of these animals no tuberculous lesions were found. The report says, in conclusion: On the whole, then, there seems to be but comparatively little danger in this direction. With regard to the communicability of milk from the tuberculous cows, expert opinions differ widely. Some hold that no danger of infection therefrom exists, provided the udder is not obviously diseased; others condemn milk from an animal that is distinctly tuberculous in any organ. The latter, says Dr. C. G. Currier (June 9, 1894), a writer on practical hygiene and sanitary science for the *New York Medical Journal*, seems the safer opinion to be guided by, yet exceedingly few unquestionable cases can be adduced in support of it. Cooking kills disease germs. None of the bacilli of tuberculosis remain alive in meat or milk exposed in every part to a temperature of 175° F. for more than ten minutes. The discussions on the subject of tuberculosis in cattle and the tuberculin test as a means of diagnosing the disease, can but be productive of a great deal of good by calling the attention of the public to the importance of having dairies clean, not over-crowded or ill-ventilated, and the dairy cows healthy, so as to insure a supply of good milk. To let the reaction to the tuberculin test be a criterion, independent of physical symptoms, as to whether an animal should be slaughtered or not, is, however, a step in advance of the present status of medical science. It is to be hoped that the test will, in course of time, prove to be an infallible one, although the injection of tuberculin would appear to afford the most valuable means, so far at our disposal, for detecting the disease in latent cases; yet at present the unbiased observer, who has carefully considered the unfavorable as well as the favorable reports, can not regard himself as justified in condemning an animal which has given a reaction to the tuberculin test, unless such animal, upon careful examination, presents some physical symptoms of the disease.

I am, etc.,

A. W. HOISHOLT, M. D.,
Physician State Asylum for Insane, Stockton, Cal.

OBITUARY.

OBED HARVEY, M.D.

On the 17th of January, 1894, there was removed from our midst a man who, by natural endowments, education, experience and extended acquaintance, had found a place that few of us may hope to reach. Than DR. OBED HARVEY few men in the State were better known or more generally liked. As a friend or public servant he was sincere, wise, unfaltering and determined. In him every worthy man found a helper, and every worthy cause an advocate. As a legislator, his enlightened sense of right and duty was his constant guide, and no man, however close the ties of friendship or however exalted his position, could swerve him from the course thus indicated. While for many years his time and attention were mostly demanded in the management of his investments, he always took a lively interest in medicine and its progress, and kept well abreast with those who followed the profession exclusively as a business. With the exception of his own family, consisting of a devoted wife, son and daughter, perhaps his loss was most keenly felt at the State Insane Asylum at Stockton, which institution for many years had been favored with his services as a Director. When Dr. Harvey was called away many felt, and must continue to feel, an irreparable loss.

A. C.

JOHN MILTON BRICELAND, M.D.

DR. JOHN MILTON BRICELAND was born at Holliday's Cave, in what is now West Virginia, in 1825, and received an academic education in Western Pennsylvania. He graduated at Jefferson Medical College, Philadelphia, in 1847, practising two or three years in North Carolina, and then removed to Texas, where he practised until 1859, when he came to California and settled in Shasta, where he continued to reside and practise until his death, May 24, 1894. He was chosen to represent his district at different times in both the Assembly and Senate, acquitting himself with the highest honor. He was a profound thinker and eloquent debater, and one of the most popular men in northern California. He served for a number of years on the California State Board of Health, and was in charge of the Shasta County Hospital for sixteen years, up to the day of his death. He loved the study of his profession, but for some years past, on account of failing health, avoided, as much as possible, the responsibility of practice.

S. M. M.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held June 13, 1894, the following physicians, having complied with the law and the regulations of this Board, were unanimously granted certificates to practise medicine and surgery in this State:

- Milton Harris Atkins, San Francisco; Coll. Phys. and Surgs. Chicago, Ill., April 3, '94.
- Miles Racey Biggar, Los Gatos; Detroit Med. Coll., Michigan, February 28, '83.
- James W. Brown, Grass Valley; Chicago Med. Coll., Illinois, March 20, '77.
- William M. Bullard, Helena, Montana; Indiana Med. Coll., Indiana February 25, '76.
- Stephen P. Cavanaugh, Petaluma; Cooper Med. Coll., California, December 7, '93.
- S. Chaffin, Santa Maria; Med. Dept. Univ. of Mich., June 30, '92.
- R. Edmond Dixon, San Luis Obispo; University of Virginia, July 1, '91.
- J. Dave Edmundson, San Francisco; Missouri Med. Coll., Missouri, March 6, '88.
- William J. Edmundson, San Francisco; Med. Dept. Univ. Tennessee, February 23, '82.
- Dora Fugard, Los Angeles; Woman's Hosp. Med. Coll., Illinois, April 2, '89.
- Hattie J. T. Hilton, Los Angeles; Med. Dept. Univ. of Michigan, March 26, '73.
- Isaac M. Houston, San Francisco, St. Louis Coll. of Phys. and Surgs., Missouri, March 8, '89.
- William Jenner, San Francisco; Univ. of Munich, Germany, July 29, '72.
- Barton Williard Johnson, San Jose; Barnes Med. Coll., St. Louis, Missouri, March 20, '94.
- Francesco La Spada, San Jose; Coll. of Phys. and Surgs., Chicago, Illinois, April 3, '94.
- James Francis McCone, San Francisco; Med. Dept. Univ. of California, December 13, '92.
- Lic. Royal Coll. Phys., London, January 25, '94. Mem. Royal Coll, Surgs., England, February 8, '94.
- John K. McLennan, Nipoma; Univ. of Manitoba, Canada, April 20, '94.
- Orlando W. Newell, San Francisco; Univ. of Iowa, Keokuk, Iowa, February 26, '57.
- William M. Ogden, Tropico; Harvard Univ. Med. School, Mass., March 7, '66.
- Florence Botsford Power, Sacramento; Willamette Med. Coll., Oregon, April 4, '93.
- R. C. Stockton Reed, Santa Fe Springs, Cal.; Cincinnati Coll Med. and Surg., Ohio, Feb. 16, '60.

Albert Bird Royal, Pasadena; Rush Med. Coll., Illinois, February 21, '77.

B. C. H. Spencer, Los Gatos; Michigan Coll. of Med., Michigan, March 3, '81.

H. B. Stanley, Sutter City; Med. Dept. Univ. of Oregon, April 2, '82.

Gottlieb Stein, Los Angeles; Coll. Phys. and Surg. Univ. of Berlin; New York, March 1, '75
Germany, January 25, '84.

Franklin Stuart Temple, Berkley; Albany Med. Coll., N. Y., April 27, '92.

Robert Frank Wallace, Biggs; Med. Dept. Univ. Tennessee, February 26, '86.

Certificates were refused to the following named: Norman M. Avery, Stockton; G. W. Covert, Long Beach; LeRoy F. Herrick, Stockton; N. M. Howard, Selma. Oliver L. Jones, Stockton; Annie Wilder, Chico, Mary E. Williams, Benicia.

CHAS. C. WADSWORTH, Secretary,

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army, from May 20 to June 20, 1894.

First Lieutenant Charles Willcox, assistant surgeon, will report on June 6th, proximo, to the commanding officer of the cavalry camp at Vasquez Canyon, near Gilroy, California. He will return to his proper station Angel Island, California, when his services are no longer required in the field. Par. 1, S. O. 57, Dept. of California, May 31, 1894.

Captain William L. Kneeder, assistant surgeon, will accompany Batteries B and M, 5th Artillery, hence to Fort Canby, Washington, as medical officer, and will return from that post with the two batteries of the same regiment en route to the harbor of San Francisco, in the same capacity. Par. 2, S. O. 58, Dept. of the Columbia: June 1, 1894.

Lieutenant-Colonel Albert Hartsuff, deputy surgeon-general, during the temporary absence of Assistant Surgeon Kneeder, will perform his duties in addition to those of medical director of the department. Par. 3, S. O. 58, Dept. of the Columbia, June 1, 1894.

The telegram from these headquarters of the 2d instant, granting one month's leave of absence, on surgeon's certificate of disability, to First Lieutenant Frank T. Meriwether, assistant surgeon, Fort Logan, Colo., with permission to leave the limits of the department, is hereby confirmed; the case being urgent, special action was essential. Par. 2, S. O. 31, Dept. of Colorado, June 6, 1894.

Captain E. C. Carter, assistant surgeon, will proceed without delay to camp of U. S. troops at Snake river bridge, Idaho, and report to the commanding officer for duty. Par. 1, S. O. 97, Dept. of the Columbia, June 14, 1894.

Second Lieutenant Fred W. Sladen, 14th Infantry, will proceed without delay to camp of U. S. troops at Snake river bridge, Idaho, and report to the commanding officer for duty with his company.

The following named officer, having been found by army retiring boards incapacitated for active service on account of disability incident to the service, is, by direction of the President, retired from active service: Lieutenant Colonel Samuel M. Horton, deputy surgeon-general.

Major James C. Merrill, surgeon, is relieved from duty in the office of the surgeon-general, to take effect July 1, 1894, and ordered to report in person to the commanding officer, Fort Sherman, Idaho, for duty at that station.

Leave of absence, for three months, to take effect July 1, 1894, is granted Major James C. Merrill, surgeon.

Promotion.—First Lieutenant Phillip G. Wales, assistant surgeon, to be assistant surgeon with the rank of captain, June 7, 1894, after five years service, in conformity with the act of June 23, 1874.

ITEMS.

Dr. Jas. K. Simpson has removed from Juneau, Alaska, to Ricton Ontario, Canada.

Dr. D. McC. Gedge has removed from Los Gatos, to 406 Sutter street, San Francisco.

Dr. W. P. Burke has removed from 1003 Clay street, Oakland, to Lytton Springs, Sonoma county, Cal.

Dr. Minnie G. Worley has removed from 1108 Sacramento street, to No. 5 Prospect Place, San Francisco.

The Archives of Pediatrics, commencing with the July issue will be edited by Dillon Brown, M. D., Adjunct Professor of Pediatrics at the New York Polyclinic.

Dr. D. D. Crowley, of Oakland, left for Europe on June 3d. The doctor expects to spend most of his time in Edinburgh and in Paris. He will be abroad until the latter part of September.

The Address of Dr. S. Weir Mitchell, to the American Medico-Psychological Association, with appended letters from prominent neurologists, will appear in the July issue of the *Journal of Nervous and Mental Disease*; the author's name will command the interest of all physicians.

Craig Colony for Epileptics.—The legislature of New York State has passed and the Governor signed the bill establishing a Colony for Epileptics in that State. The Colony is named after the late Oscar Craig, President for some years of the State Board of Charities. The bill provides for the purchase of a tract of 1,875 acres of beautiful land in the Genesee Valley, near Mount Morris, in Livingston County. The law requires that all buildings put up should be on the village plan. A Board of five Managers is provided for, and the following have been appointed: Dr. Frederick Peterson, of New York; Mrs. C. F. Wadsworth, of Genesee; Geo. M. Shull, of Mount Morris; Dr. Chas. E. Jones, a homeopath, of Albany, and W. H. Cuddeback, of Buffalo. At their organization in Albany, on the 3d of May, the Board of Managers made Dr. Fred. Peterson, of New York, President, and Geo. M. Shull, of Mount Morris, N. Y., Secretary, of the Board. Dr. Peterson, who has written so much on epilepsy, is well qualified for the position to which he has been elected. It is, however, not at all clear why the Governor should have made up his board of a lawyer, an editor and a homeopath.